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WAR ADJUSTMENTS IN RAILROAD REGULATION

The Annals

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MARCH, 1918

EDITOR: CLYDE L. KING

ASSISTANT EDITOR: E. M. PATTERSON

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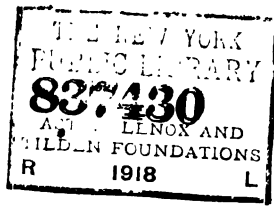
Editor in Charge of this Volume:

C. H. CRENNAN, Ph.D.



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FOREWORD

Long planned as a definitive treatment of certain measures generally agreed upon as constituting the next steps in railroad regulation, this volume was revamped almost over night by the necessity of war adjustments in the relation of the federal government to the railroads. Certainly no one could be more reluctant than the editor to speak as one with authority about the present or future of the railroads of the United States. However, by presenting opinions of widely varying tones and by making available to the readers of *The Annals* documentary material not generally accessible, it is hoped that this volume will afford some basis for clearer understanding of the present railroad situation and for public opinion to formulate regarding the socially desirable relationship between government and railroads after the war.

SHORT BIOGRAPHY OF CONTRIBUTORS

BARRON, MARY L., PH.D., mem. of the Amer. Econ. Assn.

BYRAM, HARRY E. Entered railroad service in 1881 with C. B. & Q. R. R. at Galesburg, Ill. In various departments of C. B. & Q. and Great Northern until March 1898, when made Asst. Gen. Supt. Montana Central R. R. at Great Falls, Mont.; Supt. Cascade Division Great Northern Ry. at Everett, Wash., Oct. 1899 to Oct. 1902; Asst. to First and Fourth Vice Pres., C. R. I. and P. Ry., Chicago, from Oct. 1902 to Feb. 1904, when apptd. Gen. Supt. Southwestern Dist. same road; Gen. Supt. Nebraska Dist. C. B. & Q. R. R., Sept. 1904 to May 1909, then Asst. to Vice Pres., same road; Vice Pres., same road, Feb. 1910; Pres., C. M. and St. P. Ry., Oct. 1, 1917; mem. of Exc. Com., Amer. Ry. Assn. since May 17, 1911.

CONWAY, THOMAS, JR., PH.D. Prof. of Finance, Wharton School of Finance and Commerce, Univ. of Penna.; Assoc. Ed. of *The Annals* of the Amer. Acad. of Pol. and Soc. Sci. Author: Traffic Problems of Interurban Railroads, Investment and Speculation, The Operation of the New Bank Act and of numerous articles appearing in financial and railway periodicals. Lecturer on Public Utility Investments in the Wall St. Branch, New York Univ.; Expert to the Com. on Ways and Means to Obtain Additional Revenue of the N. Y. State Elec. Ry. Assn.; Expert to the Com. on Revenue of the Am. Elec. Ry. Assn.

DECKER, MARTIN S. Engaged in expert work involving public service corp. law, procedure and valuation; served with the I. C. C. from its orgn. in 1887 to 1907, as Asst. Sec'y and Chief Examiner; from 1907 to 1915 mem. of the Pub. Ser. Commn., 2d Dist., State of N. Y., part of the time as Chrmn. of the Commn. He has been largely consulted in railroad and public service regulation cases.

ESCH, JOHN JACOB. Admitted to bar, 1887; mem. law firm of Winter and Esch at La Crosse, Wis. since 1887; mem. 56th to 65th Congresses; mem. of House Com. on Interstate and For. Com., 65th Cong. Introduced and secured the passage of the following acts relating to railroads and railroad employees: The 16-hour hours of service act; the act giving the I. C. C. power to investigate all railroad accidents resulting in serious loss of life or property and to make reports thereon; the act standardising freight car equipment as to hand brakes, running boards, grab irons, ladders, sill steps, etc.; the car service act of the last session.

HOWE, FREDERIC C., PH.D. Admitted to bar, 1894; practiced, Cleveland, to 1909; director, People's Institute, New York, 1911-14; Commnr. of Immigration, Port of New York since 1914; Mem., City Council, Cleveland, 1901-3; Pres., Sinking Fund Commn., 1904-5; mem. of Ohio Senate, 1906-9; Special U. S. Commnr. to Investigate Municipal Ownership in Great Britain, 1905. *Author:* The City, the Hope of Democracy; The British City, the Beginnings of Democracy; European Cities at Work; The High Cost of Living; Socialized Germany; Why War; etc.

LAMB, WILLIAM EDWARD, LL.B. Mem. of the firm Casseday, Butler, Lamb, and Foster, of Chicago, Ill.; Atty. for I. C. C. Oct. 1907 to Jan. 1, 1911; Special Asst. to the Atty. Gen. in various cases involving act to regulate commerce during same period, and after leaving Commn.; now Assoc. in U. S. Food Administration.

LITTLE, J. A. Since 1909 traffic mgr. for the Superior Commercial Club of Superior, Wis., City Statistician for the City Commn. of Superior, Wis., and Rate Expert and Statistician for the Board of Rrd. Commrs. of N. Dak. Duties have kept him in touch with the application of state and fed. legislation governing carriers, utilities and public warehousemen.

LOVE, J. E. Apptd. by Pres. Cleveland as sheriff of Woodward County; mem. and Chrmn. of the Okla. Corpn. Commn. since the orgn. of the 1st Okla. State govt. on Nov. 16, 1907.

PALMER, HENRY A. Ed. *The Traffic World*, a magazine devoted primarily to the subject of frt. traffic, of technical use to traffic men of both rrds. and industry, and endeavors to keep abreast with the broader aspects of railroad regulation.

PARMELEE, JULIUS H., PH.D. Formerly statistical expert with I. C. C. and U. S. Census Bur.; since 1911 statistician of Bur. of Ry. Econ. maintained at Wash., D. C., by the rrds.; ed. board, Quar. Publns. of Amer. Stat. Assn.; Fellow, A. S. A.; contributor to the Amer. Econ. Rev., Ry. Age and other periodicals on ry. and transp. topics.

PATTEN, SIMON N., PH.D., LL.D. Prof. Pol. Econ. 1888-1917, Univ. of Penna.; Pres. Amer. Econ. Assn., 1908-9; mem. Amer. Acad. of Pol. and Soc. Sci. *Author*: Development of English Thought, New Basis of Civilisation, Reconstruction of Economic Theory, etc., also extensive list of articles on economic and social topics.

PLUMB, GLENN EDWARD, LL.B. Admitted to the Illinois bar 1893; practice confined almost exclusively to public utility questions; special traction counsel to the City of Chicago 1895-1896; special state's attorney in *quo warranto* proceedings against Elevated Railways 1913-1915; special counsel for City of Chicago in proceedings against the Gas Company 1915-1917; counsel for the Four Railway Brotherhoods in the matter of federal valuation of railways, 1917.

POST, GEORGE ADAMS. Manufacturer; Pres., Standard Coupler Co.; Chrmn., exec. com. Ry. Supply Mfgs. 1904; chrmn. Am. Ry. Appliance Exhbn. held in connection with Internat. Ry. Cong., Wash., 1905; Pres., Ry. Business Assn., a natl. orgn. of mfg. mercantile and engineering concerns dealing with steam rrds.; mem. Rrd. Com. of the Cham. of Com. of the U. S.

RICH, EDGAR J., LL.B. Admitted to bar, 1891, became asst. atty. B. and M. R. R., 1895, atty. 1898, gen. solicitor 1903-1915. Has made specialty of interstate commerce law, and in such matters is counsel for various other rrys.; lecturer on the theory and practice of railroad ratemaking, Graduate School of Business Administration, Harvard Univ., since 1909; atty. with Ry. Executives Advisory Com.

SMITH, ALEXANDER WYLY. Lawyer; admitted to bar 1883, and since practiced in Atlanta, Ga.; mem. Abbott and Smith, 1885-92; Alexander W. and Victor L. Smith, 1892-9; Smith, Hammond and Smith since 1899; Gen. Mgr. Cotton States and Internatl. Expn. Atlanta, 1895; Pres. Ga. Bar Assn., 1912; Atlanta Bar Assn., 1910; Chrmn. Sub Com. on Rrd. regulation of the Rrd. Com. of the Cham. of Com., U. S. A.

THELEN, MAX, B.L. Asst. atty. and atty. Western Pacific Rwy. Co., 1907-11; atty. for Cal. State R. R. Commn. Mar. 1911-Jan. 1, 1915, and pres. of the same since Jan. 1, 1915 (mem. commn. Feb. 1912-); Past Pres. Natl. Assn. of Ry. Commrs.; Chrmn., Sp. War Com. of Natl. Assn. of Ry. and Utilities Commrs. *Joint author*: Public Utilities Act, enacted by Cal. legislature 1911; *author* of Public Utilities Act enacted by Cal. legislature, 1911; and "Blue Sky" law, 1913.

THORNE, CLIFFORD, LL.B., PH.D., LL.D. Began practice in Washington, Ia., in 1901; acted as special counsel for shippers, cities and states in various cases before I. C. C., U. S. Supreme Court and before committees of Cong.; formerly chrmn. of Board R. R. Commrs. Ia. and pres. Natl. Assn. Ry. Commrs.; mem. Amer. Bar Assn., Amer. Econ. Assn.; now practicing atty. in Chicago. Counsel for the National Shippers Conference in Fifteen Per Cent Case, at which time he suggested to the I. C. C. government operation of railroads.

VAN METRE, T. W., PH.D. Instr., Com. and Transp., Univ. of Penna., 1913-16; since, Asst. Prof. of Transp., School of Business, Columbia Univ.; mem. of Amer. Econ. Assn., Traffic Club of New York. *Joint author:* History of Domestic and Foreign Commerce of the United States, Principles of Railroad Transportation; *author* of various articles on transportation and economic history, formerly asst. ed. of *The Annals*, Amer. Acad. Pol. and Soc. Sci.

WATKINS, EDGAR, LL.B. Practicing law in Atlanta, Ga. Up to Sept. 1, 1917 and for three years, atty. for the I. C. C. As such, heard the Western Rate Advance case, the Fifteen Per Cent case, the Kansas-Okla. Passenger cases, and numerous other cases. *Author:* 1st and 2d ed. of Shippers and Carriers of Interstate and Intrastate Freight; articles for the Standard Encyclopedia of Procedure on the Commerce Court and the Interstate Commerce Commission, also magazine articles on legal ry. matters.

WHEALING, HEISKELL B. Asso. prof. of Transp., State Univ. of Iowa; mem. Amer. Econ. Assn.

WILCOX, DELOS F., PH.D. Consulting franchise and public utility expert; formerly chief of the Bur. of Franchises of the Pub. Ser. Com. for the 1st Dist. New York City and later Deputy Commr. of Water Supply, Gas and Electricity (New York City); mem. of the Amer. Econ. Assn., Amer. Pol. Sci. Assn., etc., and chmn. of the Com. on Franchises of the Natl. Mun. League.

FAILURES AND POSSIBILITIES IN RAILROAD REGULATION

BY T. W. VAN METRE

When in 1906 and 1910 the federal law for the regulation of railway transportation was amended to give the Interstate Commerce Commission the authority (1) to require railroad companies to make just and reasonable charges for their services, (2) to put a stop to objectionable discriminations, and (3) to forestall any attempts which the carriers might make arbitrarily to increase rates, it was hoped, and in many quarters believed, that the troublesome question of public regulation of rates on interstate traffic was definitely settled. During the period that witnessed the movement culminating in the improved federal legislation the state legislatures were active in dealing with the railroads, and virtually every state was given a commission clothed with authority to regulate rates on intrastate traffic. The "railroad problem" was regarded as solved. Private ownership and management were retained; an administrative organization designed to afford the public protection against exorbitantly high and unnecessarily discriminatory rates was established. It was thought that a policy which combined the double advantage of efficient private operation and effective public control would surely result in the development of a thoroughly satisfactory transportation service at rates reasonable to those who used the service and adequate for those who produced it.

Though this policy has been in effect more than a decade it does not seem to have had the entirely beneficial effect so generally expected. Expressions of dissatisfaction with the conditions of railway transportation have for some years grown steadily in number and in emphasis. While the complaints have not been due to the same causes which elicited protests and demands in former times, they have been none the less clamorous and insistent, and they have been concerned with matters just as vital to the general public, and with questions which touch an even greater range of interest than was previously involved. Owners and managers of railroad prop-

erty point to increased investment and declining returns, to bankruptcies and receiverships, to their inability to acquire investment funds necessary to enable the transportation system to keep pace in development with other branches of industry. The shipping public is resentful of continued car shortage, embargoes and impaired service, due to lack of equipment or to want of efficient railway organization, or to both. Railway labor, pressed nearer the subsistence level of income, asks for higher wages to meet the advancing cost of living, only to have the demand refused by employers, who, unable to increase arbitrarily the price of the commodity which they produce and sell, are themselves victims of increasing costs of raw materials and supplies, the prices of which are regulated neither by statute nor by commission. And in the midst of the gravest crisis in the history of the nation and of the modern world, we are confronted with the facts that the railway system of the United States is unable to meet the needs of the country; that while the system is probably more efficient than the railroad system of any other country, it has fallen far short of realizing the highest standards of economy and efficiency; that while the railways are handling a greater traffic than at any previous time they are falling short of supplying the demand for transportation; and that they are not even hauling the quantity of freight which they would possibly haul with their present equipment but with a different operating organization. In order that the people may secure food and fuel adequate to sustain life, in order to provide industry with raw materials, to save the tottering credit of the railroad companies, to anticipate the ominous situation which new demands on the part of railroad labor were about to create, and to make it possible for the country to take the effective part in the war for civilization which its huge resources and the will of its people warrant, the government has been compelled to take over the operation of the railroads. We have been forced to confess that our railroad policy has fallen far short of the ideal; the first acute emergency has compelled us to discard the entire structure of private operation and public control so laboriously and hopefully devised, of which so much was expected; by executive mandate the President is endeavoring to achieve the operating economies, long easily attainable but just as long wilfully neglected under the past policy of private management and public regulation.

The railroad problem is far from being "solved." It has entered a new, and, in most respects, a much more difficult phase. Why, after the long and apparently successful struggle to correct the wrongs of former days, are we compelled to acknowledge failure? Why are we confronted with questions more difficult and complicated than any previously encountered? And what is to be done in the future?

In answer it must be said that there are clear and definite grounds for complaint against both the system of private operation and the system of public regulation as they have hitherto existed. The outstanding fact about the system of private management is that it is inefficient because it has failed to achieve operating unity; it was for the purpose of securing a unification of the railroad line that the government assumed control of railroad operation. There is a general impression that the laws of the country have prevented unity of operation among the carriers, and a consistent attempt has been made to lay at the door of the government the failure of the carriers to coöperate in the use of their physical equipment. This impression is based on false assumptions. There is no federal law, and very few state laws, which stand in the way of coöperation among the carriers in the use of their facilities; the common use of cars, passenger terminals and tracks, is practised extensively, and it involves no violation of the law. The railroads have failed to "get together" merely because, in everything except the fixing of rates, the railroad business is a highly competitive business. The unification of terminal facilities and tracks requires that some carriers surrender certain monopoly advantages of location which they have long possessed, and such a surrender no company has ever been willing to make. There is hardly a large city in the country which has not provided a battleground for railroad strategists intent upon seizing and perpetuating the exclusive control of a favorable location. Railroad companies have captured and held with tenacious grasp the waterfront of our chief seaports and, assuming a dog-in-the-manger attitude, they have often failed to develop the property themselves and have forbidden the encroachment of others. Bodies of railroad workmen have fought pitched battles over choice bits of territory; millions of dollars have been expended in the defeat of aggressive competitors; public service has been a secondary consideration to monopoly privilege. The inefficient

and wasteful terminal systems in such great cities as New York, Philadelphia and Chicago have been enduring and impressive monuments to the lack of railroad unity. Sufficient money was wasted in the combat waged by the Wabash Railroad to enter Pittsburgh to construct a great unified terminal at that choked gateway from which it was necessary recently to divert all shipments of through freight.

It is useless to assume that the repeal of the anti-pooling clause of the Act to Regulate Commerce and the modification of the Sherman Law would pave the way for voluntary railroad unity. Those laws have not stood in the way of the operating unity sorely needed at many terminals, and the mere repeal of those laws will not affect the situation. Persons who place dependence in such legislative changes forget that former railway pools were organized solely for the purpose of controlling rates; pools were never intended to facilitate operating unity, and they never had such an effect. Railroad managers now accomplish, through informal rate agreements, all that they ever sought to accomplish through pools and formal rate agreements, and they are consequently entirely indifferent to the proposed changes in the law. Indeed the more astute managers are averse to these particular changes, which, if made, might create expectations on the part of the public which they have no inclination voluntarily to fulfill. There is no doubt that the formation of pooling agreements would make it easier for the railroad companies to effect the financial arrangements necessary to a plan of unified operation under private ownership, and if private operation is to be resumed it is desirable that pooling should be permitted; but the mere toleration of pools and rate agreements will not lead to the voluntary unification of physical facilities so long as railroad managers desire to continue their hold on their particular monopoly advantages.

In recognizing the fact that railroad managers have not gone as far as they might have done in improving the railroad service through unified operation we must bear in mind that scant measure of blame can attach to them for their failure. We do not expect a business man meekly to share his strategic advantages with every struggling rival. The ideal of American business has been competition, and the existing railroad laws are based upon the theory that railroads should be forced to compete with one another. Far

from compelling coöperative action among the carriers in the use of physical equipment, or for any other purpose, the law makers of the country have held steadfastly to the ideal of competition, endeavoring even to prevent railway coöperation in rate-making, a form of coöperation which is virtually indispensable to the satisfactory conduct of the railroad business. In pursuing this theory our legislatures have burdened our statute books with laws, designed ostensibly for the protection of the public, which have been probably a greater obstruction to the development of adequate railway service than the unfortunate policy of selfishness pursued by the railroad managers. Public regulation has scored as many errors, both of omission and commission, as has private operation.

The dual system of railroad regulation by state and federal authority is without doubt cumbersome and wasteful, and it has been a prolific source of conflict and misunderstanding. The state railroad and utilities commissions are not a conspicuous success from the standpoint of personnel. They are composed chiefly of lawyers whose main interests lie, if not in politics, in legal rather than in economic problems. Commissions of several states have been used as tools for disreputable political tactics; that they exist for the purpose of safeguarding one of the most vital business interests of the country seems to have eluded the understanding of not a few appointing officials. Ill-considered and unwise laws for railroad regulation have been passed with too great frequency; and the powers vested in commissions have often been used with injurious effects to the carriers, or just as often have remained unused to the detriment of the general public.

Underlying the entire bill of particulars against the present system of regulation, of which these counts are probably the most important, is the fact that virtually all legislation enacted for the purpose of controlling the practices of the railroad corporations is one-sided in character; it evidences a commendable effort to protect the shipping and travelling public from unfair treatment by the carriers, but it shows little evidence that the legislatures thought it would ever be necessary that special precautions be taken to safeguard the interests of the railroads. This situation, unfortunate though it be, is the quite natural result of the offensive attitude formerly assumed by the railroad interests. It was once a well-nigh universal custom of railroad officials to justify or to condone the

flagrant abuses of the transportation service, and it was their habit strenuously to combat all attempts made by legislative bodies to render their objectionable practices impossible. Total disregard by the carriers of the interests of the public which they served bred legislation in which little effort was made to consider the welfare of the railroads. Laws were of necessity fashioned as cudgels with which refractory selfish interests could be driven to a consideration of the rights of others and to a realization of their own duties and responsibilities; the stubborn opposition which the railroad interests exhibited to all legislation was chiefly responsible for the retaliatory character which the law assumed. The Act to Regulate Commerce, as amended, provides easy methods for the reduction of rates, and supplies only obstacles to the increase of rates; the Interstate Commerce Commission was definitely intended to be primarily a rate-reducing organization.

The necessity of using punitive methods in the past renders difficult the problem of forming a constructive program for the future. The old feeling of bitter resentment against the railway official of the "public be damned" type has not been eradicated. The average shipper looks with more complacency on rates which provide no net revenue for the carriers than upon rates which are ruinous to his own business. He has just as much difficulty in seeing that a reasonable rate involves the consideration of the welfare of the railroads as the railroad managers once had in seeing that reasonable rates involved a consideration of the welfare of the public. The old policy of brutal exploitation is having its natural, if undesirable, results.

A conspicuous effect of the new order has been the confession of former faults on the part of railway officials, a profession of repentance and a bid for forgiveness. All public regulation was once anathema; today regulation—"of the proper kind"—is accepted with apparent welcome. The almost universal spirit of willingness to receive guidance by public authority and the unanimous desire to let bygones be bygones speak well at least for the influence of past legislation with respect to moral regeneration.

It is an unfortunate thing that to many ears the professions of willing acquiescence in a new dispensation should smack strongly of deathbed repentance. "When the devil was sick" While it is unquestionably true that the majority of railroad officials

have seen a light, certain facts indicate in some quarters a want of sincerity, a lack of frankness, which, coupled with occasional regrettable lapses of conduct, tend to keep alive the old distrust and suspicions and to weaken belief in protestations of reform.

It would be easier to forgive and forget the excesses of railway capitalization indulged in a generation ago if, in the absence of proper administrative regulation, all railway officials would refrain from giving demonstrations of a present aptitude for similar excesses. The examples within the past few years of wanton wrecking of sound railroad financial structures for the purpose of enriching small groups of unscrupulous speculators have placed upon the record ample evidence that some of the trustees in charge of the transportation service are unfaithful to their trust and unfit to have a voice in the direction of public service. It is true that reputable railroad managers have condemned the acts of the speculators; but it is not customary for the public at large to discriminate carefully between the good and bad elements of any particular class.

Moreover virtually all railroad managers have endeavored to reap some advantage from the effects of the financial wrecking. A common feature of the widely published appeals for increased rates has been to call attention to the unprecedented mileage of railroad in the hands of receivers. It was widely advertised in 1915 that there was a greater mileage of line under the control of receivers than at any previous time in the history of the country, and this fact was earnestly presented as good evidence of the need for increased rates. A very brief analysis showed that two-thirds of the line in the hands of receivers had reached bankruptcy because of the shameful financial operations of the speculators who had secured control of the companies; the excessive mileage of insolvent railroad presented a much stronger argument for regulation of capitalization than for upward revision of freight rates.

Lapses of conduct have not been confined to buccaneering tactics in finance. The annual reports of the Interstate Commerce Commission record indictments and prosecutions for offenses which show every indication of having been wilful and deliberate infractions of the law. The persistence of attempts to evade or to violate the provisions of present laws serves to discourage disinterested individuals who otherwise would desire to help the cause of the railroads. Other acts have a similar effect. Just as one begins

to feel that the railroads are an object of persecution when a threatened strike brings about the enactment of a wage law, one's sympathy is subdued by the lack of candor shown by the railroad officials in waiting until the day after election to begin a test of the law in the courts.

Fallacious arguments and statements containing half truths weaken rather than help the position of the carriers. A statement widely circulated last year (1917) called attention to the fact that from 1907 to 1915 about five billion dollars was added to the capital account of the railroads, and that net income was thirty-three million dollars less in the latter year than in the former. From which it was deduced that the five billion dollar investment yielded a return that was thirty-three million dollars less than nothing, it being the apparent design to create the impression that because of the niggardly policy of the government this huge investment was in immediate danger of becoming a total loss. No mention was made of the fact that the year 1907 was an exceptionally prosperous year for the carriers, freight traffic being greater even than in the two succeeding years, nor of the fact that railway business in 1915 was at a relatively low ebb, traffic having been considerably less than in either of the two preceding years. Nor was it told that with the great increase of traffic in 1916 the rate of return on investment in Class I railroads (those having annual operating revenues in excess of \$1,000,000) was the greatest ever recorded. It might have been explained, too, that a large part of this investment, contributed chiefly from earnings, went to absorb the "water" of former years, which was always made to appear like real money in the investment accounts published before 1907. It is true that railroad income has showed a tendency to decline in recent years, but unqualified statements of this kind misrepresent the real conditions. They do more to frighten investors than does an adverse decision on an application for rate increases. In fact statements of this nature have aroused the suspicion that the carriers, by deliberately misrepresenting their condition, have endeavored to depress their own financial credit in order that their palpable inability to borrow needed funds on reasonable terms would bring an increase of rates which would enable them to pay for improvements out of earnings. Groundless as such a suspicion certainly is, its existence shows how it is possible for the railroads to arouse public

opposition by the very means they employ to win public sympathy and support.

It is highly desirable if private operation of railways is to be resumed that the retaliatory character of present railroad laws be eliminated, but such a desire will be difficult of attainment unless railroad authorities definitely abandon all lines of conduct which tend to keep alive the retaliatory spirit of the public. Misrepresentation of facts, violations of the law, and stock-jobbing must be halted if the confidence of the people is to be earned, and the desire to receive equitable treatment must be matched with evidence of willingness to act fairly. To the credit of railroad officialdom it must be said that a majority is evincing a spirit which promises well for the future. Unqualified abuse of present regulation is giving way to thoughtful discussions of its advantages and disadvantages; federal regulation of the issue of securities is advocated here and there; an honest endeavor is being made to suggest modifications in the present system of regulation which will provide for conserving the interests of the transportation system without depriving the public of adequate protection against unfair treatment.

On the other hand, the public is greatly in need of education. People have too long been led to believe that the interests of the railroads are diametrically opposed to all other business interests; they should be made to understand that the maintenance of the transportation system in an unimpaired state is of vital importance to the economic fabric of the nation, that the railway service should continue to develop and expand, and that existing obstacles to a healthy growth of transportation enterprise should be promptly removed. If suspicion and hostility can be replaced on all sides by a spirit of mutual confidence and tolerance the work of securing needed changes will be easy.

That some adequate system of railroad regulation can be devised which will permit the railroads to prosper and give efficient service at reasonable rates is not to be doubted, and it is with this goal in view that the next steps in railroad regulation must be taken. The United States is not prepared to adopt a program of government ownership of railroads, and it is to be hoped that once the present crisis is passed the railroads will be returned to private management and a system of regulation devised under which satisfactory results may be obtained. We certainly shall never

return to the policy recently abandoned, which has proved such a lamentable failure, and if government ownership is to be avoided we should begin at once to take stock of failures and successes and to make plans for the future. We do not have too much regulation or too little regulation; what we suffer from is an unwholesome combination of good legislation, bad legislation and no legislation. Purposes have been obscured by prejudices; we have been given drastic remedies for imaginary ills and no remedies at all for real diseases. There are a number of radical changes that can be safely made which would go far toward establishing our regulative system on a fundamentally sound basis, and would render easy the working out of the details of a harmonious and constructive policy.

The dual system of regulation as carried on at present inevitably leads to a violation of the fundamental principles upon which regulation is based: that rates shall be just and reasonable, and that they shall not be unduly discriminatory. While it is possible technically to distinguish between interstate and intrastate traffic there is in an economic sense no real distinction between them. If two cents a mile represents a just and reasonable charge for an intrastate passenger journey it can not be possible that a fare of two and a half cents a mile is a just charge for a ride taken under similar conditions but extending across an imaginary line designated as a state boundary. When dissimilar rates exist for two freight services in every way similar except that the haul in one case crosses a state boundary there is no escaping the conclusion that if one of the rates is reasonable the other is not. Whenever a railroad is compelled by virtue of the ruling of a state commission and by the pressure of competition to reduce an interstate rate, supposedly reasonable and declared so by the Interstate Commerce Commission, either the railroad is forced to accept unduly low remuneration or a disagreeable reflection is cast upon the judgment of the federal commission. If an adjustment of the interstate rate is not made to meet changes in an intrastate rate an undue discrimination is created and the dual system becomes the means of defeating the very purpose for which regulation exists. As to how this paradoxical situation may be best treated there is much difference of opinion, some people believing the problem can be met by securing coöperative action of the various regulative agencies, and others inclining to the plan of eliminating state control of railroad rates, leaving

the work entirely to a commission or commissions of the federal government. The fact that nine-tenths of railroad traffic is interstate and consequently already under the jurisdiction of the federal commission would seem to indicate that the remaining tenth could be safely entrusted to its authority without any undue increase of its work and with a considerable gain in the efficiency and uniformity of regulation.

The urgent need for a unified system of regulating the issue of securities by railroad corporations and the almost unanimous belief that this function should be entrusted to federal authority leads one to wonder why it takes so long to secure a law by which this much needed change may be accomplished. When such a law is enacted it is to be hoped that it will also include provision for some supervision of the expenditure of funds derived from the sale of authorized securities. There is a serious question in many minds as to the wisdom with which the large investments placed in the railroad business in recent years have been used. The wholesale expenditure for the construction of huge passenger terminals at a time when the need for improved freight terminal facilities was probably much more pressing has been looked upon with some disfavor both on account of the disparity of income from the freight and passenger business and because in many cases the passenger terminals represent costly duplications of effort with results that do not show much progress toward an ultimate solution of the problem of handling a rapidly congesting passenger traffic.

There should be devised some plan by which needed increases in rates can be secured with more expedition and promptness than appears to be possible under present conditions. It is not advisable that the authority of regulative agencies to suspend proposed increases be withdrawn, but it would probably be helpful if the time of rate suspensions were made shorter than is now customary. It is of the utmost importance that the credit of soundly financed railroads be maintained, and this can be done only if methods are devised for meeting promptly sudden emergencies. Rates are now flexible in but one direction and it is extremely difficult for the carriers to adjust their charges so as to meet the rapid increases in wages and prices of materials. If the power to name minimum as well as maximum rates were given to the Interstate Commerce Commission the income of the railroads would receive a greater

measure of protection. Since the charges which the railroads are allowed to make for their services are strictly regulated by commissions, if there is to be regulation of wages and of prices for materials it should be entrusted to the same authority by which income is controlled.

The adoption of a plan which would insure a more general representation on railroad commissions of the various business interests involved in the success of the railroads would be a step of progress. Laws are passed dealing with the financial management, the accounting, the operation and the rates of railroad corporations, but there is a marked dearth of bankers, engineers, railroad traffic managers, industrial traffic managers and accountants among the appointees to railroad commissions. It is probably too much to expect that under present conditions of government it would be possible to elect executives who would lay aside politics in making appointments to administrative bodies charged with the important duties of regulating private business. The increase of the salaries of commissioners, in order to make the positions attractive to suitably equipped individuals, has usually served only to increase the value of the position as a part of the political spoils and to stimulate the scramble of the unfit for the appointments. The constant change of the personnel of commissions makes it impossible for them to do well the work for which they are chosen. The English custom of providing by law that some members of commissions shall possess certain qualifications might well be given a trial in this country.

And finally as a *sine qua non* of a resumption of private operation provision must be made for the permanency of the operating unity now going into effect. Two things will have to be done. The carriers must be permitted to enter pooling agreements by means of which the financial adjustments necessary to operating unity may be effected; the carriers must be required to combine their physical facilities wherever such combination will result in improved service. There is no reason for limiting the unified "continental railway system" to the duration of the war; its proved advantages will be all the more valuable with the return of peace. It must not be expected that the railroad companies will voluntarily enter agreements for unity of operation, though it is highly probable that the present experience with unification under government

control will render compulsion less difficult. In the main, the joint use of facilities will be confined to terminals, where the wastes of competition have been greatest. Saving must be accomplished, however, through a more elastic system of routing shipments; the expensive duplication in passenger service may be cut down; and the necessity for private car lines and express companies—parasitic organizations which came into existence solely because of the lack of a unified system of operation—will be entirely eliminated; such companies have performed a real public service in the past, but with unity of railroad operation they will exist for no useful purpose. The chief economy will be effected, however, through the reconstruction and reorganization of terminals; it begins to appear that the time is forever past when the shamefully wasteful terminal operation, which exists merely as an evidence of the monopolistic power of a strongly entrenched special privilege, will be permitted to stand unchallenged. The willingness or the unwillingness of the carriers to acquiesce in coöperative arrangements which plainly make for increased efficiency will be the deciding factor in the coming controversy over government ownership.

FEDERAL CONTROL OF RAILROADS IN WAR TIME

BY MAX THELEN

On December 26, 1917, President Wilson issued his historic proclamation taking possession and control of the railroads of the United States and appointing William G. McAdoo, Secretary of the Treasury, as Director General of Railroads. By this bold and timely act, the President, in a single moment, accomplished an economic change of tremendous significance and of far-reaching potentiality for increased national efficiency during the war.

The American railroad system of which the government of the United States is now officially in possession and control, is a system of 262,000 miles, constituting over 40 per cent of the railroad mileage of the entire world, a system with securities outstanding in excess of \$17,000,000,000, a system to which the American people have always pointed with pride as the best of all railroad systems.

In addressing myself to my subject, Federal Control of Railroads in War Time, I shall first describe the organization of our railroads during the war prior to the President's proclamation. Next I shall consider some of the problems with which the railroads have been confronted during the war. Then I shall draw attention to the solutions of the problem suggested by the Interstate Commerce Commission and to the solution made effective by the President's proclamation. Finally, I shall give some consideration to the results which may reasonably be expected to follow from government operation of the railroads during the war.

WAR ORGANIZATION OF RAILROADS IN OTHER COUNTRIES

In all the principal nations of Europe, the railroads are being operated during this war by the government.

In England, prior to the present war, private capital had always owned and operated the railroads. On August 4, 1914, the very day on which England declared war against Germany, the British government took over the operation of all the railroads. A committee of which a Cabinet member is the general chairman manages the railroads but their actual operation remains in the hands of

the former operators. All government traffic is carried free and no account thereof is kept. The government guarantees to the holders of railroad securities the same net revenue as the railroads earned in 1913, the last complete year before the war. If there is a surplus, the government keeps it and if there is a deficit the government meets it out of the treasury.

In France, prior to the war, one railroad was owned and operated by the government and the others were owned and operated by private capital. Upon the outbreak of the war the French government immediately took over the operation of all the railroads.

In Germany and Italy, the railroads were owned and operated by the government prior to the outbreak of the war. In these countries public ownership and operation have continued during the war.

WAR ORGANIZATION OF RAILROADS IN THE UNITED STATES, APRIL 6-DECEMBER 28, 1917

In the United States, with the exception of the Panama Canal Zone and approximately 250 miles of railroad in Alaska, our railroads have been owned and operated by private capital. Prior to December 28, 1917, the United States was the only nation of any consequence which during this war continued the ownership and operation of its railroads by private capital.

On August 29, 1916, more than seven months prior to the entry of the United States into the world contest, this government cleared the way for the operation of our railroads directly by the government, if such course should become necessary in war time. On that day President Wilson signed the Army Bill, which bill provided in part as follows:

The President, in time of war, is empowered, through the Secretary of War, to take possession and assume control of any system or systems of transportation, or any part thereof, and to utilize the same to the exclusion, as far as may be necessary, of all other traffic thereon for the transfer or transportation of troops, war material and equipment, or for such other purposes connected with the emergency as may be needful or desirable.

This is the provision of law on which President Wilson particularly relied in issuing his proclamation of December 26, 1917. Prior to this proclamation, the power conferred by this sentence of the Army Bill of 1916 had been exercised by the government with reference to only one small railroad in New Jersey.

On April 6, 1917, the Congress of the United States declared that a state of war existed between the United States and Germany. On the preceding day, Franklin K. Lane, Secretary of the Interior, introduced and had passed by the Council of National Defense the following resolution:

Resolved, That Commissioner Willard be requested to call upon the railroads to organize their business so as to lead to the greatest expedition in the movement of freight.

Acting in accordance with this resolution, the principal railroad executives of the country met in Washington on April 11, 1917, and resolved that during the war they would coördinate their operations in a continental railway system, merging during such period all their merely individual and competitive activities in the effort to produce a maximum of national transportation efficiency. The direction of the continental railway system thus organized was placed by the railroads in the hands of the executive committee of the Special Committee on National Defense of the American Railway Association. This executive committee was also known as the Railroads' War Board.

Under this resolution, the railroads of the United States continued until December 28, 1917, to be operated under private ownership and private management.

On May 29, 1917, President Wilson signed an act of Congress giving to the Interstate Commerce Commission jurisdiction over railroad cars used in the transportation of property by any carrier subject to the provisions of the Interstate Commerce Act. The Interstate Commerce Commission thereupon created a Division of Car Service. Authority with reference to car service was also claimed and exercised by a committee of the railroads known as the Committee on Car Service of the American Railway Association, and by the War Department, the Navy Department, the National Food Administration, the National Fuel Administration and the Shipping Board.

While the Interstate Commerce Commission was thus granted all the necessary authority to act, the Commission has thus far issued no order under the car service statute and has been content to permit questions of car service to be disposed of largely by the railroads' own committee on car service. The fact that at least

six separate and distinct authorities, five governmental and one private, assumed jurisdiction over the question of car service of course resulted in great confusion and inevitably demanded that the entire matter be placed in charge of a single responsible authority.

On August 10, 1917, President Wilson signed an act of Congress making it unlawful by physical force or by threats of physical force to obstruct or retard the movement of cars or trains engaged in interstate or foreign commerce. The same act authorized the President, whenever he may find it necessary for the national defense and security, to direct that such traffic as, in his judgment, may be essential to the national defense and security, shall have preference or priority in transportation. The President is authorized for this purpose to issue orders either directly or through such person or persons as he may designate for that purpose or through the Interstate Commerce Commission.

Under this statute, President Wilson appointed Robert S. Lovett as Director of Priority in Transportation. Judge Lovett issued five orders calling for priority in railroad transportation. The first order provides for preferential shipments of bituminous coal to points on the Great Lakes. The second order declares that open top cars other than flat cars shall not be used for the transportation of materials and supplies for the construction or repair of streets, roads and highways, theatres and other buildings used for amusement or of pleasure vehicles, furniture or musical instruments. The third order provides for the priority of the transportation of coal from the coal mines of Utah and Wyoming to the west and the northwest. The fourth order provides that the railroads of Texas shall give preference to the transportation of cottonseed cake and cottonseed meal to feed the starving cattle in Texas and New Mexico. The fifth order designates the order in which materials and supplies for the government, war industries and other essential industries shall have preference or priority in car supply and movement.

The reason for the enactment of the Priority Statute was the frank statement of the railroads that they would be unable during the war under their existing organizations to carry all the traffic which might be offered for transportation and their desire that some legal method might be provided by which priority or prefer-

ence in transportation might be given to the most essential commodities.

SPECIAL WAR PROBLEMS

Having sketched the organization effected by the railroads and the official action taken by the government prior to the proclamation of December 26, 1917, I shall now address myself to a few of the more important problems with which our railroads were confronted as the result of the war.

In this connection I shall refer first to the car shortage problem, then to the financial condition of the railroads and then to the difficulty of securing labor and equipment.

Car Shortage

From the nation's point of view, the most serious problem with which the railroads have been confronted is their growing inability to transport the nation's traffic. Car shortage is not a new phenomenon. It existed in the United States prior to our entry into the war. A serious car shortage existed in the fall of 1912. During the latter part of 1916 and the early part of this year the car shortage situation, as is well known, was acute. The car shortage which existed prior to our entry into the war has been accentuated by it. The congestion of terminal facilities, the requisitioning of coastwise shipping by the federal government, the tremendous increase in the number and output of industries engaged directly or indirectly in the manufacture of materials and supplies used in war, and the transportation of men and materials to and from our army cantonments have all served to increase the difficulties encountered by the railroads in seeking to transport the nation's traffic.

Active coöperation between the railroads, the shippers and the public authorities materially increased car efficiency. The shippers exercised greater promptness in the loading and unloading of cars and greatly assisted by loading cars to capacity. The railroads increased the daily mileage of freight cars and locomotives, decreased the time during which equipment was in repair shops, eliminated some unnecessary passenger mileage and requisitioned between 150,000 and 200,000 empty freight cars from railroad systems where they were not immediately needed to other parts of the country where most needed. The public authorities, both state

and federal, gave publicity to the existing conditions and advised and encouraged both the railroads and the shippers to do their full part to help meet the exigency.

The net result of the combined activities of the railroads, the shippers and the public authorities was stated by the Railroads' War Board to be an increase in the efficiency of the existing equipment amounting to approximately 15 per cent. In other words, after the entry of the United States into the war, practically the same amount of railroad equipment handled approximately 15 per cent more traffic than was handled before the war.

For a while, the reports on unfilled car requirements, as published by the railroads, showed apparently a great improvement in the situation. The car shortage, as shown by these reports, decreased from 148,627 cars on May 1 to 31,591 cars on September 1. However, by October 1 the car shortage increased to 70,380 cars and by November 1 to approximately 140,000 cars and subsequent to November 1 the situation continued to grow worse. Under these conditions, more drastic suggestions than any theretofore made were offered in an effort to meet the situation. Dispatches from Washington indicated that the railroads supplied to Judge Lovett and to Fuel Administrator Garfield a list of 525 commodities the transportation of which was regarded by the railroads as least essential and it was suggested that an order might shortly be made by Judge Lovett providing that the transportation of such commodities should cease in favor of arms and munitions, coal, food and other absolutely essential commodities.

Coming close on the heels of these dispatches, the railroads east of Chicago agreed to pool all their facilities in an effort to provide greater transportation efficiency. They agreed to pool their shops, coal and other supplies; to pool and redistribute all open top freight cars; to divert traffic from congested railroad lines to open routes, and to ask for a rearrangement of the transportation of coal from mine to market. These matters all seem to be covered in the agreement made by the railroads on April 11, 1917, but were not undertaken by the railroads until the latter part of November and then only in eastern territory. By reason of the anti-pooling section of the Interstate Commerce Act, the agreement of the railroads could not and did not contemplate the pooling of earnings.

After eight months of effort, the car situation was worse in the latter part of December than it was when the United States entered the war and it was clear that measures more drastic than any theretofore taken would have to be applied if the nation's essential transportation needs were to be supplied.

Railroad Finances

Railroad finances presented another important and serious war problem.

Prior to the entry of our country into the war, prominent railroad executives made the statement that the railroads needed one billion dollars yearly for at least ten years for the construction of additions, betterments and extensions and to enable the railroads to keep up with the country's requirements for increased terminal facilities, freight and passenger equipment, double tracks and other railroad facilities. I shall not take time now to consider why these necessary improvements were not made by the railroads and why it has been difficult or impossible for many of them to secure the necessary funds. Suffice it to say that the requirements for additional construction and facilities which existed prior to the war were strongly accentuated by the war. During the war, more than ever, the railroads need additional cars, additional locomotives and additional terminal facilities. How could they secure the necessary funds?

The normal method of securing funds for capital expenditures is the sale of securities. During the war, however, it will be practically impossible for the railroads to secure large amounts of additional capital by the issue of their securities on their own credit and their sale to the investing public in competition with liberty bonds and other government securities.

As the war progressed, it became increasingly evident that the railroads would be unable on their own responsibility to meet the war's imperative requirements for additional terminal facilities, double tracks, cars and locomotives.

Labor and Equipment

One of the most serious problems with which the railroads were confronted as a result of the war was the necessity of securing enough labor to maintain their way, structures and equipment in

safe and serviceable condition. The call to the armed forces of the nation and the competition of other industries have seriously depleted the supply of labor available to the railroads and they have no effective means to replenish the supply. Likewise, it became increasingly difficult for the railroads to secure the necessary equipment, materials and supplies. Locomotives and cars ordered by the railroads last summer have not been delivered and there seemed no reasonable prospect for their delivery before the expiration of many more months.

SOLUTION OF PROBLEM

As the fall of 1917 advanced, it became more evident, day by day, that the nation's railroad war problem could not be satisfactorily solved under the existing system and that a radical change was imperatively required to prevent a complete break-down of the nation's transportation system.

Report of Interstate Commerce Commission

In view of these conditions, the Interstate Commerce Commission on December 1, 1917, filed with the Senate and the House of Representatives a special report on transportation conditions as affecting and as affected by the war.

The Commission said in part:

Since the outbreak of the war in Europe, and especially since this country was drawn into the war, it has become increasingly clear that unification in the operation of our railroads during the period of conflict is indispensable to their fullest utilization for the national defense and welfare. They must be drawn, like the individual, from the pursuits of peace and mobilized to win the war. This unification can be effected in one of two ways, and we see but two.

The Commission then stated these two ways. The first is operation as a unit by the carriers themselves, requiring the suspension during the war of the anti-pooling section of the Interstate Commerce Act, a modification of the anti-trust laws in so far as railroads are concerned and loans to the railroads by the government for capital purposes. The second alternative is operation as a unit by the President as a war measure.

Commissioner McChord filed a separate report in which he holds that "the strong arm of governmental authority is essential if the transportation situation is to be radically improved."

That continued private operation of the railroads by the car-

riers themselves, being the first alternative suggested by the Interstate Commerce Commission, would not solve the problem seems clear for a number of reasons.

First, private operation of the railroads is in its very nature incompatible with war needs. Under private operation, each railroad very naturally seeks to gain all possible traffic so that it may be able to pay interest on its bonds and notes and, if possible, dividends on its stock. The price of failure to secure sufficient traffic is bankruptcy. On the other hand, while the nation is at war, traffic should be moved with an eye solely to the greatest efficiency in helping to win the war. The most efficient operation of the railroads as a war agency may require that traffic be diverted entirely from one railroad whose terminals are blocked to another whose terminals are open; that traffic be diverted in whole or in part from one railroad to another railroad which can be more economically or efficiently operated; that one of two parallel, competing lines be operated solely for west-bound or north-bound freight and the other for east-bound or south-bound freight, or vice versa; that certain railroads stop carrying passengers and that others stop carrying freight; and that any number of other acts be done all of which will take traffic away from one railroad and give it to another and thus interfere with railroad earnings. Private operation in its very nature can not solve these problems. Government operation can.

Second, private operation can not during the war secure the funds imperatively needed by the railroads for additional capital expenditures.

Third, private operation can not during the war secure an amount of labor sufficient to maintain railroad properties in safe and serviceable condition, nor can private operation secure with sufficient promptness all the necessary equipment, materials and supplies.

Hence it appeared quite clearly that the nation would be driven to the alternative of direct operation by the government itself.

President Wilson's Proclamation

By his proclamation of December 26, 1917, President Wilson took possession and control of all railroads and shipping owned or controlled by them, engaged in general transportation, whether

operated by steam or electricity. Street railways and electric railroads commonly known as interurbans are for the present excluded from government operation.

The President appointed William G. McAdoo, Secretary of the Treasury, as Director General of Railroads with power to operate all the transportation systems affected by the proclamation. The proclamation declares that until and except so far as the Director may from time to time otherwise determine, the operation of the railroads shall be continued by their officers and employes in the usual and ordinary course of business in the names of their respective companies. The President also directs that until and except so far as the Director may from time to time otherwise determine, the transportation systems affected by the proclamation shall remain subject to all existing statutes and orders of the Interstate Commerce Commission and to all statutes and orders of regulating commissions of the various states. All orders of the Director, however, shall have paramount authority and be obeyed as such. The Director is instructed to enter into arrangements with the various companies for a just and reasonable compensation to be paid to them for the possession and use of their properties "on the basis of an annual guaranteed compensation, above accruing depreciation and the maintenance of their properties, equivalent, as nearly as may be, to the average of the net operating income thereof for the three year period ending June 30, 1917."

The result of such negotiations must be reported to the President for his action. The proclamation contains other provisions to which it is not now necessary to refer.

In a statement accompanying the proclamation, President Wilson declared that immediately on the re-assembling of Congress he would recommend that definite guarantees be given to the railroads, first, that their properties will be maintained during the period of federal control in as good repair and as complete equipment as when taken over by the government and, second, that they shall receive a net operating income equal in each case to the average net income of the three years preceding June 30, 1917.

To complete the plan, legislation would also seem to be necessary with reference to the part which the government must undoubtedly play in connection with securing the funds needed for railroad additions, betterments and extensions while under government operation.

In accordance with the terms of President Wilson's proclamation, the possession of all the transportation systems therein described passed to the government of the United States at noon on December 28, 1917, and they are now being operated under the control of the federal government acting through Director McAdoo.

RESULTS FROM GOVERNMENT OPERATION

It is too early to predict and it may be indelicate to suggest the details of the plan of government operation which must be worked out by Director McAdoo. The broad outlines, however, of what may be accomplished by government operation of the railroads during the war seem well marked. The government can (1) disregard absolutely all previous traffic conditions and can operate the railroads as a single system with an eye solely to the maximum efficiency to meet the nation's war needs; (2) divert all or a part of the traffic, passenger or freight or both, of one railroad and give it to another, which can transport it more economically or efficiently; (3) eliminate all property and employes used and all expenditures incurred in the purely competitive activities of the various railroads, effect tremendous savings in construction and operating expenses, and utilize the man power thus saved for necessary railroad work or for other useful and necessary activities; (4) secure on reasonable terms the funds necessary for additional terminal facilities, equipment and other additions and betterments; (5) secure the labor necessary to keep railway properties in safe and serviceable operating condition and can expedite the manufacture for the railroads of necessary cars, locomotives and other equipment.

That Director McAdoo will be successful in accomplishing these results and will thereby greatly increase this nation's efficiency during the war is the earnest hope of every patriotic citizen.

What the effect of government operation of the railroads will be on the movement for government ownership is a question which will be much discussed. If government operation is a success, a powerful stimulus will undoubtedly be given to government ownership. In the meantime, every effort of the nation should be concentrated on making government operation an unqualified success. Whether government ownership will follow government operation is a question which we can answer when we have won the war.

PRINCIPLES AND PRACTICES OF CAR SERVICE REGULATION

BY H. E. BYRAM

The problem of car service may be stated briefly as the formulation of a plan whereby freight car equipment may be made to perform the maximum of service in a unified system of transportation with the minimum of sacrifice of the rights of the owner of the cars. Under this definition the subject presents two distinct phases, one economic, the other financial.

In what manner shall car service be regulated in the public interest so that each unit shall furnish the greatest amount of transportation?

How shall it be regulated so that rights of possession and compensation for use will be equitably adjusted as between the owner and the user of the equipment?

The managers of the railroads and of other concerns which own the cars must consider the problem from the standpoint of the interests of their own concerns; but they must also consider it from the standpoint of the public welfare. The governmental regulating authorities are apt to consider the problem primarily from the standpoint of the public; but they should not ignore the interests and the rights of the companies which have invested capital in cars. Therefore, while regulating authorities may put more emphasis on the interests and rights of the public, and the railway managers may put more emphasis on the interests and rights of the individual companies, there really is no fundamental difference between the problem of car service as it presents itself to the railway manager and to the regulating body; and there can be no substantial difference between their solutions of it, if each gives due weight to both the private and the public rights and interests involved. It will be desirable to review the methods the railways themselves have used in dealing with the problem of car service before discussing the problem presented by regulation of car service.

Even under the system of car interchange in force before normal conditions were disturbed by the entrance of the country into the Great War, the railway industry of the United States, in its han-

dling of car equipment, bore some of the aspects of a single system. The complexity of the problem of car service, even under normal conditions, had constantly grown greater. It had been influenced by the number of conflicting interests involved, which had increased in number through the advent of new and the dissolution of previously consolidated organizations; by the great extent of territory through which car equipment was handled; by the development of specialization in the adoption of equipment for the handling of particular commodities; but more than all by the aggregate increase in the demands of industry for adequate equipment facilities, the occasional scarcity of equipment, and a recognition of the economic necessity, under any condition, of securing the best possible utilization of existing equipment. However important the problem may be under normal conditions, its importance is greatly magnified when, as now, it is essential that every item of transportation equipment be made to perform its full part in carrying out the purposes for which we are engaged in the war.

ELEMENTS OF THE PROBLEM

The general term "car service" is commonly used to designate all that concerns the handling of the car as a vehicle of transportation, not only as between one railway and another, but also as between railways and the shipper or consignee. On June 30, 1916, according to the statistics of railways compiled by the Interstate Commerce Commission, there were in service in this country approximately two and one-half millions of freight cars. Of these, about 2,300,000 were owned by railway companies, and the rest by private car line companies, mining companies, etc. The number of the different classes of cars owned by the railways were as follows:

Box cars	1,024,418
Flat cars	136,719
Coal cars	899,638
Stock cars	83,487
Tank cars	9,828
Refrigerator cars	51,746
Other cars	92,427
<hr/>	
Total	2,298,263

The mileage of all railways in the United States on the same date was 259,210 miles. There are then on the railways of the

United States approximately 9 freight cars per mile of railway. The ownership of these cars, excluding those of private ownership, is in the hands of about 1,000 railway companies. The number owned by each company varies from a few cars to upwards of 250,000.

JOINT USE OF CAR EQUIPMENT

The plan under which railways have for many years used equipment interchangeably is the result of voluntary action on the part of railways themselves to the end of securing greater facility of operation and hence more efficient service. The Interstate Commerce Commission has always recognized the commercial necessity of through shipments, and consequently the movement of cars over other than the owning roads; and, indeed, the original Act to Regulate Commerce seems to recognize it, though in a negative way. The Act, approved on February 4, 1887, provides that

It is unlawful to enter into any agreement to prevent the carriage of freight from being continuous from place of shipment to place of destination by carriage in different cars, unless such interruption was made for some necessary purpose and without intent to interrupt continuous carriage, etc.

In a decision¹ rendered November 13, 1911, the Commission affirmatively defined the duties of the carriers with reference to a unified service:

The railroads of the country are called upon to so unite themselves that they will constitute one national system; they must establish through routes, keep these routes open and in operation, furnish all the necessary facilities for transportation, make reasonable and proper rules of practice as between themselves and the shippers, and as between each other.

WHY THERE IS A PROBLEM

If cars performed service only upon the road by which they are owned, there would be no problem of car service regulation in the sense in which it now exists. Between railways, as distinguished from those phases of the problem that arise between railways on the one hand and shippers and consignees on the other, the questions to be settled are predicated upon the ownership of the cars and their service upon other than the owning line. For this reason, the problem of car service is of chief importance in times of scarcity

¹ *Missouri & Illinois Coal Co. v. Illinois Central*, 22 I. C. C. 39.

of equipment to meet the requirements of shippers—"car shortage." Since "car shortage" does not always mean a deficiency of equipment upon all the railways considered as one transportation system, but frequently means only that cars wanted in the West are detained in the East, or *vice versa*, it is clear that some definite plan of distribution should be determined upon for securing the maximum of service from each car with the minimum of infringement upon the rights of ownership.

A fundamental principle has been laid down by the American Railway Association that every railroad is entitled to the use of cars equal to its ownership. As a financial proposition it would seem that a road is entitled either to the service of its owned cars, in which case it would be expected that their earnings would pay interest on the investment and a fair average yearly earning plus an amount sufficient to keep them in repair and to provide for depreciation; or, if the cars are in the service of or detained on other roads, to receive from the holding road compensation sufficient to cover these several items. This is, in its simple form, the end to be attained.

It would seem, perhaps, that the application of a fixed mileage or per diem charge for the service or detention of a car upon a foreign road should afford an equitable basis for settlement between roads in all cases. Both systems have been tried. Neither has proved wholly satisfactory. Up to 1902, except in a few experimental instances, the only basis upon which a road received payment for the use of its cars on a foreign road was at a rate varying in different years from one and one-half cents to three-fourths of a cent per mile. The main objection to the plan was that charges did not accrue when a car was not moving. It might conveniently be used as a warehouse while cars belonging to the road holding it were engaged in more profitable service. It is not necessary to mention the possibility of error in reporting mileage. However, it is much easier to check up the service of a car by days than by miles; and in 1902 the railways constituting the American Railway Association adopted per diem rules, by which the owning road is paid at a fixed daily rental while its cars are in possession of other roads, which with numerous changes in rate and conditions of application have since remained the basis of settlement of car service between railways.

TWO VIEWS OF CAR SERVICE

With the development of the American railway system there have developed two schools of opinion as to the rights of railways to the possession and use of rolling stock. One rests on the basis that all car service rules that have ever been in force, except as they may have been locally modified within recent months to meet emergency conditions, recognize the fact that ownership of a car involves a right to its prompt return after it has performed its immediate function in the through service on which it had been forwarded. The second school of opinion assumes that the creation of through routes and joint rates has in effect created a pool of all cars used in such service, and that existing rules do not effectually regulate the service in the pool.

The Commission on Car Service of the American Railway Association, in formulating the two views above set forth, reported in March, 1916, that, whatever the solution of the problem, the efficiency of the rules in force had not been proved because of the lack of their enforcement. It then gave notice that, beginning on June 1, 1916, it would act not only as a mediator in disputed matters, as heretofore, but also would enforce the rules by the imposition of the penalties the rules authorized. The Commission found it had not sufficient authority to deal with the existing situation. The same emergency called for putting into effect certain changes in the rules and finally for the adoption of a revised code of rules, which in turn has been upset in their operation by the transportation necessities of a nation actively engaged in war.

Car equipment is conveniently considered in two general classes. Special equipment, for example, open cars, ordinarily involves an empty return movement. Under normal conditions its service seems to have been fairly regulated by the rules in force. "Legal tender" equipment, for example, box cars, may be and ordinarily is, loaded at any time at any point in any direction when there is traffic. The use of this class of equipment could not be effectively regulated under the rules formerly in force governing special equipment, because of a general recognition of the economic waste involved in returning an empty box car directly to its home road when by a diversion it could advantageously be loaded for movement in another direction. There has therefore been in effect for years a practically unregulated pool of this equipment. The result has been

that in times of unusual movement of traffic roads that had provided a seemingly adequate supply were unable to furnish cars, while roads with a less adequate supply were able to meet all demands because of their tenacity of hold upon foreign cars. The unregulated pool is therefore particularly unjust during times of car shortage to originating lines that have provided their quota, or more than their quota, of cars. It is likewise unjust to the public served by those lines which, without fault of their own, have been short of cars. In times of surplus, the unregulated pool is a source of injustice to distributing lines, because they are unable to get rid of the surplus equipment and are forced to pay per diem charges.

The situation and the remedy were summed up by the Commission on Car Service in 1913. The following paragraphs are extracted from its report of that date:

To be just to the railroads themselves and to the public generally, this pool should be regulated, to the end that there shall be secured to every road the use, when it needs them, of its quota of "legal tender" equipment (whether its own or the equivalent in foreign cars) or, in the alternative, compensation in money for the difference. Such regulation can be made effective only by the abandonment of the right to physical return to the owner of its own cars, and the substitution of the right to possession and use by each line of "legal tender" cars in kind equivalent to the cars by it owned and contributed to the pool.

The objections to recognizing a box car pool in the past have rested largely on the desire of roads which have supplied their quota of "legal tender" equipment, and have maintained it on high standards, to be assured of the use of cars measuring up to their standards. The answer is, that in practice existing car service rules have not secured this result so far as box cars are concerned.

It is true that the force of the objections to a box car pool is augmented by the inequalities in construction, in strength, equipment, capacity and cost of maintenance, of the box cars contributed to this irregular pool by the different roads. But it is also true that these inequalities are gradually disappearing. The adoption of a standard box car should remove the last objection to such a pool and would besides be attended with a considerable saving in cost of building.

While there was, as before stated, no fair opportunity to test completely the effect of enforcement of the car service rules formerly in force, the new system adopted since this country entered the war seems to have tended to demonstrate the efficiency of pooling in securing a maximum of service from each car and a minimum of de-

lay to the shipper in meeting requisitions. During the six months ending with September, 1917, the railways handled 14 per cent more freight than in the corresponding months of last year with substantially no increase in equipment. Though establishing a virtual pool of box cars, the new rules recognize the right of the owner to the prompt return of special equipment and this is doubtless for the good of the service as well as a recognition of ownership rights. The roads that have an adequate supply of special equipment—coal, refrigerator or automobile cars—doubtless have them because of the amount of traffic originating on their roads requiring such facilities. It would neither be fair to them nor in the interests of the highest efficiency, except in emergency, to use this equipment for purposes for which the ordinary box car would serve as well or better. Recently, however, a pool of the coal cars of the Eastern Railways has been temporarily established.

The principal features of the system developed by the Commission on Car Service under the authority conferred upon it as a war measure and acting in coöperation with the Interstate Commerce Commission have been the transfer of equipment from one section of the country to another where there was a greater need for it; and the success of its efforts to secure a greater efficiency of movement and loading of cars. Local shortages have been reduced by the transfer to needy localities of the required equipment collected in comparatively small lots from a large number of roads. More than 200,000 cars have been thus transferred. Until the usual increase in volume of traffic in the late fall and the inevitable slowing down of movement in the early days of winter, this system of handling by one authority had operated to reduce unfilled requisitions for cars from 148,000 cars on May 1, to 34,000 on September 1, though, as before stated, 14 per cent more traffic had been handled than during the corresponding months of the previous year. The increase in traffic handled was partly due, also, to the increased mileage per car per day, in which the efforts of the railways were greatly assisted by the coöperation of shippers, as they were also in the loading of cars more fully to capacity. So far as box cars are concerned, the present rules and the flexible system under which they are in force seem to afford the best means available for handling car service. The designation, from time to time, of commodities that may or may not be transported in open cars or special equip-

ment, has a tendency to minimize the economic waste involved in the usual empty return movement. Though designated as emergency measures, the rules and their application are based on efficiency of service.

The power conferred upon one body to regulate car supply as exigencies may require seems to provide for fulfilling the conditions of the economic phase of the question; and the right of appeal concerning the handling and use of equipment by a foreign road affords means for equitable financial adjustment. The slogan of the service is: "In all cases, keep the cars moving, and settle differences of opinion afterward."

As already intimated, the Interstate Commerce Commission, by act of Congress on May 29, 1917, was given express authority to regulate car service. The act defines the term "car service" as including "the movement, distribution, exchange, interchange, and return of cars used in the transportation of property." It requires every carrier to "establish, observe and enforce just and reasonable rules, regulations and practises with respect to car service," and gives the Commission authority to "suspend the operation of any rules, regulations or practises then established with respect to car service for such time as may be determined by the Commission, and also authority to make such direction with respect to car service . . . as in its opinion will best promote car service in the interest of the public and the commerce of the people."

In the administration of this law the Commission in July, 1917, organized a division of car service, which, under the reorganization of the Commission, has been changed to the Bureau of Car Service. It is evident, however, that the Commission believes that the railways through their own Commission on Car Service have been doing all they could to secure the greatest efficiency in the use of cars; for its Bureau of Car Service has thus far devoted itself chiefly to coöperating with the railways' Commission on Car Service. The Interstate Commerce Commission says in its annual report for 1917:

Where occasion requires, orders or directions will issue under the car service act and directly to the carrier or the carriers directly concerned. Subject to this fundamental principle, the Commission is availing itself, and will continue to avail itself, of coöperative effort on the part of the carriers' Commission on Car Service. . . . The present is peculiarly a time for the avoidance of unnecessary expense and duplication of work, and it has seemed to the Commission desirable

to utilize to the fullest extent all means for insuring maximum efficiency in the handling of cars.

That the spirit and manner in which the Commission has gone about its regulation of car service thus far have been effective in furthering the object it mentions—*viz.*, “insuring maximum efficiency in the handling of cars”—is unquestionable. In periods of heavy traffic, such as the present when there are not enough cars to move all the freight, the great problems of car service, whether viewed from the standpoint of the managements of the railways, or that of the regulating authority, are, first, that of putting cars where they are most needed, and, second, that of securing the utmost service from each car. With equal information as to the conditions, the decision of the railways’ Commission on Car Service and that of the Interstate Commerce Commission’s Bureau of Car Service as to where cars are the most needed are pretty sure to be the same. Likewise, with the same information as to conditions, their decisions are pretty sure to be the same as to the best methods of securing the greatest efficiency in the utilization of cars. But it does not follow that government regulation of car service is superfluous. The railway man naturally looks at the problem from the railway standpoint. The representative of the government naturally looks at it from the standpoint of the public. Friendly coöperation between the representatives of the government and the officers of the railroads is desirable in order adequately to protect and promote the interests of both railways and public.

REGULATION OF CAR SERVICE UNDER GOVERNMENT CONTROL OF OPERATION

By JOHN J. ESCH

The existence of freight car shortage since March, 1916, and especially in the last two months, resulting in increased cost of living and widespread suffering to millions of our population, has compelled consideration of causes and methods of relief. There have been such shortages in the past, but they have been temporary, due largely to seasonal demands.

CAR SHORTAGES SINCE 1907

Owing to the phenomenal prosperity during the year 1907, there were two periods of car shortage in that year, one during the mid-summer months when the maximum shortage reached 30,370 cars, the other during the last three months of the year when the shortage on December 24 reached 208,586 cars. During the following years of 1908 and the greater portion of 1909 there was business depression, and the number of idle cars reached on April 29, 1908, a maximum of 413,338 cars. During October and November of 1909 there was a small shortage. During 1911 there was no shortage. In the fall of 1912 the shortage reached a maximum on November 7 of 51,259 cars. During the latter part of October, 1913, there was another small shortage, with no shortage for 1914, the first year of the European war. The surplus of idle cars extended throughout the year 1915, with a maximum on April 1 of 327,084 cars. In 1916, however, owing to the tremendous demands upon the United States by the allied powers for munitions and supplies, there was a shortage on March 1 of 19,537 cars. Beginning with September 1, 1916, the car shortage increased until it attained 114,908 cars on November 1, with almost an equal number on December 1. On January 1, 1917 the car shortage had been reduced to about 62,000, but during that month it increased to over 100,000 cars. The shortage continued throughout the year and January of this year finds the situation more aggravated than at any other period of our history.

CAR SUPPLY

For the last ten years about 135,000 freight cars on the average have been ordered and about 2,500,000 are now in use, but only about 80,000 were ordered during 1917, a material reduction notwithstanding the increased demands of traffic. "Prices, labor, material, deliveries and lack of funds have all contributed to keep the railroads out of the market." In the testimony presented to the Newlands Joint Committee on Interstate Commerce, representatives of the railroads declared that, owing to various causes and particularly to the regulatory control exercised not merely by the Interstate Commerce Commission but also by the several state commissions, it was impossible to secure sufficient funds to finance the roads, and, as a consequence, orders for new cars, locomotives and other rolling stock have not been given and the normal increased demand therefor on the part of some roads has not been met.

This testimony, taken together with the declaration made several years ago by Mr. James J. Hill that "the railroads of the country must invest over five billion dollars for enlargement of facilities upon roads now existing," leads to the conclusion that the present car shortage, to a considerable extent, is due to the underequipment of the roads. While it is true, as declared by the Supreme Court of the United States,¹ "That it would be unreasonable to undertake to require a carrier to provide facilities which would meet every condition that might arise," nevertheless, common carriers should provide sufficient equipment to take care of seasonal demands, for these are recurrent, can be anticipated with reasonable certainty, and should be provided against. All efficiently managed public utilities seek to take care of the peak load, and while this may mean keeping idle part of the equipment even for the greater portion of the time, the convenience of the public must be met.

SOME CAUSES OF CAR SHORTAGE

Some of the causes for existing paralysis of transportation are the following:

1. Lack of adequate yard, trackage, warehouse and elevator facilities, especially in large manufacturing and producing centers and at terminal points at the seaboard.

¹*Houston & Texas Central R. R. v. Mayes*, 201 U. S. 321.

2. Lack of sufficient cars and motive power and inefficient operation.
3. The holding of cars by shippers and consignees for speculative purposes and the failure of consignees to unload promptly.
4. Lack of ocean carrying space.
5. The slow movement of freight and shortage of cars resulting from the practice of carriers in permitting reconsignment of cars and the extent to which shippers have availed themselves of reconsignment.

The car statistics furnished by the American Railway Association and the Interstate Commerce Commission show an unprecedented movement of cars from middle and western producing centers toward the Atlantic and Gulf port terminals for consignment abroad. Inadequate warehouse, elevator and other facilities at these terminals and lack of ocean carrying space has resulted in unprecedented congestion, thousands of cars being held on terminal tracks for days, weeks and even months, awaiting unloading. This congestion has prevented the prompt movement of unloaded cars westward to their home lines. Notwithstanding embargoes declared by western roads on eastbound shipments, the congestion has been only partially relieved.

CAR SERVICE LEGISLATION

Car service rules initiated by the carriers and voluntarily assented to have existed for several years. These rules regulated the exchange, interchange and return of cars, prescribed per diem charges and penalties for the violation of these rules. During periods of lax and normal freight movement rules were generally obeyed, but during periods of car shortage or congestion they were openly violated and penalties were not enforced because of fear of loss of traffic or retaliation. There was neither inclination nor power of enforcement.

During the latter part of 1916 the Interstate Commerce Commission made repeated efforts to get the American Railway Association, through its car service committee, to enforce its own rules, but failed notwithstanding the fact that the executives of some of the leading roads gave ready and effective support. The Commission, therefore, to relieve a situation growing constantly more desperate, after notice of hearing, issued an order on January 18, 1917, modifying the car service rules of the American Railway Association by requiring the carriers to return to their owners without diversion or misuse all foreign open-top cars and all railroad owned

or controlled refrigerator, heater, ventilator and insulated cars after being unloaded at destination, either loaded or empty, (a) direct if belonging to direct connections, (b) through the proper home route if belonging to other than direct connections, or in accordance with such rules as may be found reasonable and be prescribed, and to return all other foreign freight cars to their owners in accordance with car-service rules 1, 2, 3, and 4 of the American Railway Association, or to effect a relocation of such cars in accordance with such other rules as may be found reasonable and be prescribed.

This order was to have become effective April 15, 1917. War having been declared April 6, on April 11 the chief executive officers of the railroads met and resolved "That during the present war they will coördinate their operations in a continental railway system . . . to produce a maximum of national transportation efficiency" and created the organization necessary to effect this object. A car service committee was appointed and through it an earnest and partially successful effort was made to abate car shortage and congestion.

Owing to the fact that the Interstate Commerce Commission was not unanimous in its order and report of January 18, 1917, due to doubts as to its authority to prescribe general rules relative to interchange of cars, and the recommendation of the Commission that the "punch" of law was necessary to secure prompt and universal observance, Congress passed, and on May 29, 1917 the President approved the Car Service Act, defining "car service" as including "the movement, distribution, exchange, interchange and return of cars used in the transportation of property by any carrier subject to the Act to Regulate Commerce" and making it the duty of every such carrier "to establish, observe and enforce just and reasonable rules, regulations and practices with respect to car service." It was further provided that:

The commission shall, after hearing, on a complaint or upon its own initiative without complaint, establish reasonable rules, regulations, and practices with respect to car service, including the classification of cars, compensation to be paid for the use of any car not owned by any such common carrier and the penalties or other sanctions for nonobservance of such rules.

Whenever the commission shall be of opinion that necessity exists for immediate action with respect to the supply or use of cars for transportation of property, the commission shall have, and it is hereby given, authority, either upon complaint or upon its own initiative without complaint, at once, if it so orders,

without answer or other formal pleading by the interested carrier or carriers, and with or without notice, hearing, or the making or filing of a report, according as the commission may determine, to suspend the operation of any or all rules, regulations, or practices then established with respect to car service for such time as may be determined by the commission, and also authority to make such just and reasonable directions with respect to car service during such time as in its opinion will best promote car service in the interest of the public and the commerce of the people.

To carry out these broad powers effectively the Commission on July 9, 1917, created the Bureau of Car Service, through which it has undertaken to regulate this service throughout the United States in coöperation with the carriers' committee. Much good has already been accomplished and thousands of cars, irrespective of ownership, have been ordered from congested centers to the South and West where shortages existed. Car equipment has been pooled to expedite movement of coal to Lake Erie and Atlantic ports. The use of open-top cars has been denied to industries not essential in war production.

HOW CAR SERVICE CAN BE INCREASED

Car service can be increased through voluntary effort on the part of shippers and carriers and through regulation. Shippers can load cars 10 per cent above their stenciled carrying capacity; ship full instead of less than carloads lots; increase their storage room; install effective loading and unloading devices; order no more cars than needed; regulate their shipment as far as possible so as to avoid a glutted or congested terminal market; purchase coal and other supplies at times when traffic is slack; join with other shippers to make a full carload billed to a common destination; coöperate with carriers in establishing "sailing days."

The carriers can on their own motion expedite traffic movement by reducing the 15 per cent of locomotives ordinarily under repair to 10 per cent, thereby adding 3,325 to the number in service; increase the average per diem run of locomotives from 75 to 90 miles, thereby in effect adding 3,300 locomotives; reduce the number of cars now normally under repair from 6.5 per cent to 4 per cent and thereby release 64,000 cars for active service; increase the average per diem run of freight cars from 25 to 30 miles and thereby add 20 per cent or 515,000 cars to the existing equipment.

If these suggestions making for efficiency were even partially

carried out by shippers and carriers there would be no question of car shortage to solve at this time. While there has been an earnest and patriotic spirit manifested throughout the country to get the most use out of cars and locomotives, the compulsion of law and regulation made pursuant thereto has been found necessary.

REGULATED CAR SERVICE

The car service rules voluntarily adopted years ago by the carriers have, since the decision of the Interstate Commerce Commission of January 17, 1917, with the modification already referred to and under the Car Service Act, become laws capable of rigid enforcement. Existing rules approved by the Commission expedite traffic by allowing carriers to make a per diem charge per car for the use by another carrier with a maximum of \$1.25 per day; to make a charge for the diversion of a foreign car; to charge demurrage against shippers for detaining cars after the two days' free time allowed for unloading; to make a charge for the reconsignment privilege. The purpose of these charges is not to increase the revenues of the carriers but to hasten the return of cars to the owning road and the loading and unloading of cars. The more rapidly this is done the less cars will be required. Slow movement means congestion. Doubling the number of cars without hastening their movement will only add to the congestion.

In time of emergency the Commission can suspend, with or without notice, hearing or the making or filing of a report, the operation of any existing rules, regulations or practices with respect to car service and can make such just and reasonable directions as will best promote such service in the interest of the public and the commerce of the people. Only recently the demurrage rates were increased to a maximum of \$5 per day to lessen congestion. That high demurrage rates reduce by one-half the time consumed by shippers and consignees in loading and unloading, the experiences of California and Canada fully attest.

Congress could greatly increase car efficiency by standardizing cars, locomotives and other equipment. It has already standardized air brakes, automatic couplers, running boards, grab irons, ladders, sill steps and hand brakes in the interest of safety. Standardization of cars and equipment will result in efficiency as surely as it has already done in the manufacture of automobiles. There

are almost as many types of cars as there are railroad systems. As they pass from system to system they must be repaired from time to time while on lines remote from the owning line and where necessary spare parts are not obtainable: delay or an imperfect job results. In 1914 the railroads hauled one empty for every two loaded cars, due in large measure "to the design and construction of freight cars, which are for the greater part designed for special service, rendering them incapable of transporting a load except in one direction with a given commodity." Hopper coal cars are an example. With standardization, a type of car could be built that would be readily unloadable and fitted for a back haul. If unification of control is to result from the war, standardization may follow naturally and without legislation. It should come gradually, even as a result of legislation, and should apply only to new equipment.

REGULATION OF CAR SERVICE UNDER GOVERNMENT CONTROL

By proclamation of December 26, 1917, and under the Act of August 29, 1916, and the Resolution of April 6, 1917 declaring war against Germany, the President, through the Secretary of War, took possession and assumed control at twelve o'clock noon of December 28, 1917, "of each and every system of transportation and the appurtenances thereof located wholly or in part within the boundaries of the continental United States" consisting of railroads, etc. The proclamation gives to the Director General of Railroads appointed thereunder, power to issue orders, general or special, which shall be paramount, even though they override existing statutes and orders of the Interstate Commerce Commission or of state commissions.

Conceding the constitutionality of the grant of such power, it is evident that existing car service rules applicable in time of peace and under private ownership may be materially modified or even abrogated now that the roads are taken over, under the war power. Already the Director General has requested the Interstate Commerce Commission to change demurrage rates to a maximum of \$10 per car. In his first order issued December 29, he ordered all transportation systems to be operated as a national system, and "all terminals, ports, locomotives, rolling stock and other transportation facilities" to be fully utilized without regard to ownership. This

gives sanction to pooling of equipment, already practiced since last May as to freight cars, by the Railroads War Board.

The unification of the roads and surrender of control by their owners of all equipment will be the most salutary kind of revolution, a revolution which in large part will remain whether the roads are returned to the owners after the war or are controlled or owned by the government. Unified government control during this war will make the freight car as current as a dollar bill and be governed by the same economic law—go where it can be used. It will be as responsive to the needs of traffic as the Pullman car is to “the needs of the traveling public.” If this be true, then fewer car service rules will be necessary during the war.

Under order No. 1 of the Director General, designation of routes by shippers, heretofore authorized by law, are to be disregarded to promote speed and efficiency, cross hauling of freight and use of circuitous or long-haul routes are to be discontinued for the same purpose as are also traffic agreements between carriers. The result of this order will make it possible to discharge many men, eliminate advertising, maintenance of needless offices and effect other economies, but the greater cost of government management as a rule, may offset the savings, if past experience is any guide.

Before the proclamation of December 26, the railroads, in the interest of coal conservation and to release train crews and locomotives to haul freight and to relieve congestion, had abandoned many of their passenger trains, especially in eastern territory. In furtherance of this movement the Director General has ordered “so far as practicable, the annulment of passenger trains which interfere with giving necessary freight service.” Hundreds of passenger trains have already been taken off and a reduction of 20 per cent of through trains is contemplated. On the passenger trains still remaining, the use of private and observation cars has been abandoned and the use of sleeping and parlor cars on daylight runs, because of their weight and restricted seating capacity, are to be dispensed with. As passenger traffic is diminished, freight traffic can be increased and speeded up and the winning of the war made possible. To do this, who will not be willing to make some sacrifice?

PHYSICAL NEEDS OF THE RAILWAYS UNDER GOVERNMENT CONTROL

BY JULIUS H. PARMELEE

Railway congestion may result from two wholly distinct forms of inadequacy, so far as concerns equipment; an inadequate supply of equipment, or inadequate utilization of equipment already in service. Having first ascertained which particular form of inadequacy is responsible for some specific experience in congestion, it becomes possible to determine what shall be the proper remedy. Government control over the American railway system, which became effective as the calendar year 1917 was drawing to a close, was made necessary partly by the congested condition of railway traffic, especially in the eastern section of the United States. To arrive at an estimate of the equipment and other facility needs of the railways while under government control, it is advisable briefly to review recent traffic history, to ascertain what steps led up to the President's proclamation taking over the railways, and finally to attempt a forecast of the probable traffic developments and physical needs of the near future.

For the sake of clearness and convenience, certain terms will be used throughout this article to convey certain specific meanings, as follows: "Period of government control" will be used to include such period after the declaration of peace as may be assigned (either by Congressional or Presidential action) for the retention of the lines. The term "railway facilities" throughout the article will denote the general railway plant, including roadway and track, bridges, stations and other structures, with the sole exception of equipment. "Equipment" will refer to the movable part of the plant, including locomotives and cars of all kinds. "Motive power" will refer to locomotives, while "rolling stock" will be used to apply to cars as distinguished from locomotives. Inasmuch as the discussion will center almost wholly on freight traffic problems, "rolling stock" will indicate freight cars unless otherwise specified.

The railways of the United States are under constant obligation not only to maintain their facilities and equipment, including

repairs, retirements, and ordinary replacements, but also to add such new facilities and new equipment each year as will enable them to keep up with the growth of traffic. There is a clear distinction between maintenance of the railway plant at normal level, and such improvements and betterments as represent additions to the plant. The cost of maintenance is an operating expense, met from current revenues and chargeable to "maintenance of way and structures" and "maintenance of equipment" accounts. The cost of additions is a capital charge, whether the new facilities and equipment are paid for out of surplus earnings or are financed by the sale of securities. The distinction is not only one of accounting, but also reflects the purposes for which maintenance and additions are carried out. Maintenance work is designed to keep a railway in condition to meet the normal traffic demands that, judging by past records, will be made upon it; new additions are made to care for the added traffic that is expected to develop from the growing needs of a community, or to promote economy and efficiency in operation. These distinctions should be borne clearly in mind, as they have a definite bearing on any discussion of physical railway needs.

GROWTH OF TRAFFIC, EQUIPMENT AND FACILITIES TO 1917

Growth of railway traffic has been astonishingly great in recent years. From 1908 to 1915 the annual increase in tons of revenue and non-revenue freight carried one mile, or ton-miles, was less than 4 per cent, while the number of passengers carried one mile, or passenger-miles, increased less than 2 per cent per year. Since 1915, however, both forms of traffic have grown by leaps and bounds. The calendar year 1916 showed an increase in freight traffic over the fiscal year 1915 (ended June 30) of about a third, the increase being from a little over 300 billion ton-miles to about 400 billion ton-miles. This was the growth of a period of eighteen months. The calendar year 1917 showed an increase over 1916 of not less than 10 per cent, which would place the 1917 traffic in the neighborhood of 450 billion ton-miles. For the thirty-month period from July 1, 1915, to December 31, 1917, this represents an increase from about 300 billion to 450 billion ton-miles, or 50 per cent. Similarly, passenger-miles increased from 32 billion in the fiscal year 1915 to 35 billion in the calendar year 1916, an increase of approximately 10 per cent in eighteen months. The passenger

business in 1917¹ was unusually heavy, partly owing to the demands of war travel, and partly to heavy troop movements. While exact figures are not as yet available regarding the passenger traffic of 1917, it was approximately 15 per cent greater than in 1916, which would make it not less than 40 billion passenger-miles. This is an increase for the period from 32 billion to 40 billion passenger-miles, or about 25 per cent.

We have thus presented an extraordinary picture of traffic increases as between the annual periods ended July 1, 1915, and December 31, 1917, as follows:

- Ton-miles, from 300 billion to 450 billion a year, or 50 per cent.
- Passenger-miles, from 32 billion to 40 billion a year, or 25 per cent.

The significance of these astounding figures will be made apparent in our discussion of physical needs.

Railway mileage has increased but slowly during the past few years, the average annual increase being about a thousand miles. This refers to miles of line, or first main track. Increase in additional trackage, such as second, third and fourth tracks, yard tracks, and sidings, constructed to enable railways to handle a more intensive traffic, has been more rapid than in miles of line. Additional trackage has been growing recently at the rate of nearly 2,500 miles a year. Applying these annual rates to the thirty-month period from July 1, 1915, to December 31, 1917, the best available figures make it appear that miles of line increased about 2,500 miles, and additional tracks about 6,000 miles. While this represents a considerable amount of new construction, it is an increase in line mileage of only 1 per cent, and in additional track mileage of about 5 per cent. Recollection that freight traffic increased 50 per cent during the same period and passenger traffic 25 per cent will lead to a realization of the additional traffic burden thrown on each mile of line in 1917 as compared with 1915. In fact, traffic density as measured by ton-miles and passenger-miles per mile of line increased 48 per cent in the case of freight traffic and 24 per cent in the case of passenger traffic. This burden fell primarily on the railway staff, secondarily on the terminal facilities, motive power, and rolling stock, freight and passenger, and lastly on the other facilities included in the railway plant.

While the growth of traffic was throwing this greatly increased

burden onto the railways, was there a corresponding increase in the amount of equipment in service and available to handle the traffic? Detailed figures are not available to December 31, 1917, but it is possible to approximate an answer to this query. During the eighteen months from July 1, 1915, to December 31, 1916, the increase in number of steam locomotives in railway service was less than 2 per cent, the increase in freight cars was considerably less than 1 per cent, and in passenger cars approximately 1 per cent. The year 1917 offers a most complex record as to the construction and distribution of new equipment, and as will be shown a little later, the demands of our allies and of our own armies in France drew off much of the production originally intended for the American railways. It probably does not overstate the case to say that as a whole 1917 did not add over 1 per cent to the supply either of locomotives, or of freight and passenger cars, which would make the number in service on December 31, 1917, greater than on July 1, 1915, by about 3 per cent in the case of locomotives and about 2 per cent in the case of cars. Thus with an added 2 or 3 per cent of equipment, and an additional 1 to 5 per cent of trackage, the railways in 1917 were handling 25 to 50 per cent more traffic than in 1915!¹

The answer to what seems at first sight a most puzzling riddle may be found partly in the fact that 1915 was a year of low traffic, partly in the monthly freight efficiency reports issued by the Railroads' War Board beginning with April, 1917. Such great increases in traffic as have just been indicated could not have been handled merely by taking up the slack of 1915, but must have been met either by greatly increasing railway facilities or by utilizing existing facilities to a much greater degree than formerly. We have seen that mileage and equipment showed very moderate rates of growth from 1915 to 1917, while traffic was growing by tremendous leaps; the first alternative, that of increased facilities, is therefore untenable. That the second alternative must more nearly approximate the correct solution is confirmed by the War Board efficiency reports and by the testimony of close students of the period. During the first eight months of the War Board's operations (April to November

¹ Owing to the continually increasing size and capacity of equipment, and to improvements in other facilities, railway facilities do not need to increase proportionally so fast as traffic. My emphasis is merely on the very wide margin here shown between the different rates of increase.

inclusive) the average load per loaded car increased from 24.8 tons in 1916 to 27.1 tons in 1917, or 9.3 per cent; the number of tons hauled per train increased from 626 tons to 672 tons, or 7.3 per cent; finally, the daily mileage of locomotives increased 1.9 per cent. This resulted in a saving of 32 million train-miles and 1,350 million car-miles. That is, even with heavier loading, which might logically have tended to slow up the movement of trains over the tracks, the drive for efficiency inaugurated by the Railroads' War Board had its result in greater carloads joined together in heavier trains, traveling longer distances each day than formerly. Combining these different factors into one, each freight locomotive during the seven-month period of 1917 hauled a greater amount of traffic, measured in terms of ton-miles, by 11.1 per cent, than during the corresponding period of 1916, while similarly each freight car carried a greater traffic by 9.9 per cent. Available statistics on passenger traffic efficiency are far less definite and complete than those for the freight traffic, but with the same equipment limitations as in the case of freight, on the one hand, and similar increases in passenger traffic on the other hand, the use of each locomotive and car in the passenger service must also have increased greatly.

The comparisons of the preceding paragraph are all of 1917 with 1916, and portray considerable gains in efficiency in 1917. We have already seen that the year 1916 showed great traffic increases as compared with 1915, and with but slight additions to equipment and other facilities. It seems safe to assume, therefore, that operating efficiency in 1916 was at a higher level than in 1915, and this in spite of the fact that 1915 was a year of business depression, when railway facilities were not being utilized to the fullest. If the efficiency of 1916 was greater than that of 1915, while the efficiency of 1917 was considerably greater than in 1916, it follows that the two-year gain in efficiency was more than considerable.

The foregoing review of growth of traffic, of equipment, and of facilities to 1917 brings us to the prospects and needs of the period of government control. At the outset we are confronted with the annoying fact that difficult as it may be to picture the immediate past and grasp the present, it is almost impossible to outline the future, even in the most sketchy fashion. What will be the period of the war, how will its needs and demands shape themselves, what new alignments of men and materials will be necessary before the

clarion of peace is sounded? These and many similar queries call for answer before the attempt be made to prophesy the future needs of the railways. Yet some idea of the railway future is necessary, if our transportation facilities are to be kept up to their mark and do their share toward the prosecution of the war and toward the later general reconstruction.

EQUIPMENT PROBLEMS IN 1917

Before turning to the future, it may not be unfruitful to glance for a moment at the equipment problems confronting the American railways in 1917. The annual output of locomotives for domestic use has not been below 2,000 for many years, and has risen much higher in some years. In 1916 it was slightly over 4,000. Anything short of 2,500 would appear insufficient to take care of replacement and renewal needs. It is clear, of course, that a certain amount of construction each year serves merely to fill up such gaps in equipment in service as are due to loss by fire or wreck, consignment to the scrap heap because no longer fit for service, and obsolescence. Replacements and renewals are for the most part charged to operating expenses. Over and above replacement demands are the demands for entirely new equipment to meet the needs of increasing traffic; and the cost of such equipment is a capital charge. In 1917 the number of locomotives built for domestic use was only 2,600, or less than half the total output for the year, the balance being allotted to the French and Russian governments and to the American army in France. These 2,600 engines for domestic order hardly more than met the normal replacement needs of the railways. With freight and passenger traffic in 1917 much higher than the 1916 and 1915 levels, and with locomotive construction hardly sufficient to meet replacement needs, it is clear that what motive power was in service in 1917 must have been driven at top speed to accomplish the necessary results.

The situation with regard to freight and passenger cars was not so bad, although it was serious enough. The normal replacement need for freight cars is probably in the neighborhood of 100,000 cars a year. In 1916, construction for domestic use amounted to 135,000 cars, while in 1917 it dropped slightly below 120,000. That is, the domestic supply of freight cars in 1916 and 1917 added about 55,000 cars above replacement needs to equipment already in service, or

something over 2 per cent. Passenger car construction for domestic needs averages normally not less than 2,500 cars. In 1916 it was 1,800 and in 1917 about 2,000, or below normal. Production of freight cars for foreign order in 1917 was about 32,000, while passenger car construction for foreign use was negligible.

The statistics of the foregoing paragraph may be summarized in the statement that with a freight and passenger traffic running much greater than in 1915, the supply of new freight cars for domestic use was only slightly greater than sufficient for replacement needs, certainly hardly equal to providing for the abnormal traffic requirements of 1917, while the supply of new locomotives and passenger cars was not only below normal in 1917, but was probably insufficient to meet normal requirements for replacement.

With this review of 1917 conditions in mind, and having before us also the growth of traffic and of equipment and other facilities from 1915 to 1917, we may now turn to the prospects for the period of government control. Such a survey of future prospects must rest partly on traffic possibilities and partly on the possibility of keeping up the supply of new equipment, rails, bridges, ballast, ties and countless other materials that are included under the head of facilities.

TRAFFIC POSSIBILITIES DURING PERIOD OF GOVERNMENT CONTROL

First, as to traffic possibilities. In the matter of passenger service, it may be assumed that under government control of transportation facilities and operation the needs of passenger travel will be very largely subordinated to the movement of absolutely necessary war materials and other necessary freight, food and fuel. In Great Britain every effort has been made since the outbreak of war to reduce passenger travel upon the railways. To effect reductions low rates have been cancelled, special service has been cut down or abolished, free baggage and other privileges have been largely withdrawn, and every effort made to induce the general public to refrain from unnecessary travel. When these various devices did not produce the fullest results desired, the Railway Executive Committee in 1917 took the radical step of increasing passenger fares 50 per cent by a stroke of the pen, the avowed object of the move being to decrease travel rather than to increase revenues. Still other restrictions are in prospect. Whatever steps may be

taken in the United States to stem the tide of passenger travel during the war, it is safe to predict that serious and earnest attempts will be made to keep it down to a reasonable level, if possible, and that the demands of the traveling public for such facilities as new passenger stations and other conveniences, and for passenger equipment (especially for special equipment such as Pullman, drawing, observation, restaurant cars, and the like) will not be met until the freight service has been taken care of, and that means not at all during the progress of the war. The history of the principal warring nations has given us a striking picture of official effort to keep down passenger travel, and we may reasonably assume that the United States will soon be a figure in the same picture. In fact, efforts have already been made, both under private management and government control, to make travel less attractive by providing less trains and fewer special services and conveniences per train. Passenger traffic may be kept stationary, or may even be reduced if that proves practicable.

The problem of freight transportation is wholly different. If the United States is to be a significant factor in winning the war, her transportation system must be tuned up to highest pitch, both to meet the normal and legitimate demands of our economic activities, to supply vital munitions and supplies to our troops across the seas, and to assist our allies with the essential food and other supplies that will hold up their hands in the final stages of the conflict. Freight traffic will probably continue at its maximum, then, during the remainder of the war period. The maximum to date was the freight record of 1917, which was in the neighborhood of 450 billion ton-miles. In fact, the war demands for transportation in 1918 and later years may go above this maximum of 450 billion ton-miles. True, the traffic will be different in many respects, will be in different directions, and will be made up of different articles and in different proportions from that of normal times, but that the speeding up of our war machine will lay demands on our transportation system far above any yet made seems almost beyond question. Let us assume at the beginning, therefore, that traffic demands during the period of government control will be more likely to increase than to decrease.

GOVERNMENT UTILIZATION OF EQUIPMENT AND FACILITIES

How will these demands be met? By utilizing the existing railway plant to fuller capacity than ever before, or by increasing the plant? Probably both methods will be called into play. In the first place, government unification should lead to many improvements in the utilization and coördination of railway facilities. The President's address to Congress on January 4, 1918, stated this clearly in the following words:

It had become unmistakably plain that only under government administration can the entire equipment of the several systems of transportation be fully and unreservedly thrown into a common service without injurious discrimination against particular properties. Only under government administration can an absolutely unrestricted and unembarrassed common use be made of all tracks, terminals, terminal facilities and equipment of every kind. Only under that authority can new terminals be constructed and developed without regard to the requirements or limitations of particular roads. But under government administration all these things will be possible,—not instantly, but as fast as practical difficulties, which cannot be merely conjured away, give way before the new management.

The routing privileges heretofore held by the shipper, under the provisions of the Interstate Commerce Act, can be withdrawn by the Director General of Railroads if he deems desirable, and a hampering element in freight transportation be removed thereby. As a matter of fact, the congested situation in the east has already compelled the waiving of this privilege in many instances. At first sight it may not appear clear why the routing privilege hampered traffic, but second thought will bring into relief the fact that congestion could not be relieved at terminal or junction points, or at gateways into the east from west and south, so long as shippers were directing that certain freight shipments should move into or through those very terminals, junctions, or gateways. It actually happened during the summer of 1917 that the Railroads' War Board pleaded with large shippers of certain food supplies to relieve congestion at the Pittsburgh gateway by diverting their traffic through the south-east. The War Board could not accomplish this because the law tied their hands; the food administration took up the matter and the diversion was accomplished. Under government control freight can be routed with little reference to the preferences of the shipper; the chief consideration will be to move freight, and to move it quickly.

Again, government control can unify the supply and distribution of motive power and equipment, making of it virtually a national pool. The Railroads' War Board in 1917 pooled several kinds of freight car equipment by meeting demands for cars from whatever source happened to be available. Motive power was also pooled to a limited degree in December. Congestion in the Pittsburgh district grew so serious that 100 western freight locomotives were commandeered by the War Board and placed in eastern service, while to relieve the coal situation in the West Virginia district 25 locomotives were drawn from southeastern roads and turned over to two roads operating in that district. These efforts, excellently designed as they were, could be but partial solutions of the problem of congestion. The government can organize an extensive pool of motive power and of freight equipment without delay, friction, or any of the hampering restrictions that may accompany deals between separate roads. In fact a step in this direction was taken by Director General McAdoo in January, when he directed American locomotive builders to deliver to specific eastern lines all locomotives completed during the months of January, February and March for railway order, regardless of the roads for which they were under construction. It was estimated that this would release 700 locomotives for almost immediate service in the east during the three-month period, only a part of which had actually been ordered by eastern roads.

Further, the Railroads' War Board pooled certain forms of freight traffic, notably the lake coal pool of June, the tide-water coal pool of July, and also iron ore pools at the lake ports. By agreement, shippers of coal and iron ore patriotically waived their individual identities for the time being and delivered their products at a common point or points, to be drawn against for whatever purpose seemed most needful. Shippers of other goods also threw their goods into what were virtually common pools of their kind of product. But while the War Board met with considerable success in the pooling of traffic, they were prohibited by law from pooling freight revenues, and this prohibition was a bar to the fullest success of their efforts. Roads that lost traffic in 1917 through pooling operations lost revenue as well, and while losses were incurred without protest by many roads, the inequity of the situation spelled failure for any widespread extension of pooling measures. The

Director General is hampered by no anti-pooling or anti-trust laws, and the guarantee to each road of its normal net income makes it, for the time being, a matter of little moment how, in what directions, and by what routes traffic is collected, forwarded, pooled, or otherwise disposed of.

Thus it becomes clear why the government, as the controller of the railway system, will be subject to none of the hampering restrictions which undoubtedly had their share in bringing about the events that resulted in the President's proclamation.

Not only can cars be pooled and distributed without restriction, but all the related and complex questions of car supply, of demurrage charges, of free time for loading and unloading, and other perplexing problems underlying car service, can be solved at one stroke by the government. Several steps have already been taken in that direction, as in the rules fixing demurrage rates on a sliding scale that become almost prohibitive after a week, and instituting definite restrictions as to free time for loading and unloading. The Director General may conceivably travel farther along the same line before the period of government control is terminated. Here, too, the Railroads' War Board through its important sub-committee, the Commission on Car Service, had attempted a solution of the problem with definite results. Freight congestion is largely a matter of inadequate car supply and uneven car distribution as between localities. The War Board's reports of total car shortage throughout the United States in 1917 throw light on the results attained by the Board through the Car Service Commission. From May 1 the total car shortage, that is, cars for which there was demand but no immediately available supply, fell rapidly to September 1, then reacted quickly to a high level on November 1. This reaction was partly seasonal, but probably represented also in part the rising tide of traffic offered.

The Railroads' War Board met also with considerable co-operation from shippers in their campaign to increase car loading. Rules governing minimum weights were modified by the roads, and many shippers agreed to sink the identity of their goods and combine similar products from different factories in common carloads. The result of this campaign is reflected in the increased carload averages of 1917 already referred to, amounting to nearly 10 per cent.

As to making the present supply of motive power and rolling stock available, then, the government will have virtually a free hand. The only hampering factor may be found in the fact that during 1917 the pressure of traffic, the shortage of labor, and the high cost of materials kept some roads from maintaining their equipment at the highest level of repair. This applies more specifically to motive power than to cars, and also in some degree to track maintenance.

The question of the adequacy of maintenance work is extremely difficult of solution. That the maintenance level in 1917 was not sufficient to the heavy traffic of that year may be admitted, but the reasons are a matter of some discussion. The cost of transportation increased 28.9 per cent during the first eleven months of 1917, while maintenance costs increased only 11.1 per cent, maintenance of equipment increasing 14.9 per cent and maintenance of way 6.6 per cent. This comparison is only suggestive, inasmuch as labor and materials enter into transportation and into maintenance in different proportions, yet it has a certain significance. It seems reasonable to consider the scarcity of labor, the high cost of materials, and the terrific pressure of war traffic which forced equipment to remain in service when it might ordinarily have been shopped, as the predominant causes for the relatively low maintenance of 1917. Railway shop labor was unusually mobile, owing to the competition of higher wages in munitions and other factories, and flowed into other industries with appalling ease, some railway shops turning over their forces two or three times during the year. This shortage of shop labor had an especially disastrous effect on the maintenance of equipment.

This disposes of the problem of inadequate utilization of equipment and brings us to the more difficult problem of the supply of equipment and other facilities, and necessary additions thereto. This problem introduces factors so complex and so vast that we can hardly attempt more than a brief enumeration of the factors and a statement of their general relationship to the question as a whole.

NEEDED EQUIPMENT AND FACILITIES UNDER GOVERNMENT CONTROL

To begin with, it must be clear that a living organism must either grow or degenerate. The transportation system is a part of the economic body of a people; it furnishes the economic arteries and pumps goods through those arteries. It must live and grow, or the

people's progress is doomed. We have seen that the past two and a half years have added little to the facilities of the roads, compared with the great increase in traffic. We have also seen that traffic will continue at a high level, perhaps higher than in 1917, and that the general condition of railway equipment and facilities at the beginning of 1918 is on some roads below par. These various realizations lead necessarily to the conclusion that new facilities and new equipment must be added under government control and in considerable amounts, if the railways are to perform their full share in the war.

In the earlier analysis of maintenance and additions, we saw that the former is chargeable to operating expenses, while the latter is a capital item that may be charged to surplus or provided for by means of new securities. As to railway maintenance work during the period of government control, that should proceed on a fully adequate level. This evident fact is recognized in the legislation now before Congress (which may become law before this is in print), which specifically provides for adequate maintenance and depreciation charges.² These should take care of war time requirements for repairs to equipment and facilities, for replacements, and for ordinary renewals. As expenditures of this nature are chargeable to operating expense, they will be guaranteed by the federal government during the period of control. Under these conditions, there should be no reason why the railways cannot keep up their plant to a fair degree of efficiency, barring only the war time exigencies of the supply of labor and of materials.

Railways never stop improvement work. Even under the uncertain financial and operating conditions of the last six months of 1917, the roads invested about \$200,000,000 in their properties, in large measure for the purpose of bringing their plant nearer the point of most efficient service. We may assume that during the period of government control the railways will so far as possible continue their custom of putting a portion of net earnings back into

² The language of the proposed Senate bill is as follows: "The President is further authorized to make in such agreement all reasonable provisions for the maintenance, repair, and renewals of the property for the depreciation thereof and for the creation of necessary reserve funds in connection therewith, to the end that at the termination of federal control the property shall be returned to each carrier in substantially as good repair and in substantially as complete equipment as at the beginning of federal control."

their plant, and will invest part of the net operating income (the so-called "standard return" of the law) guaranteed them by the government, in their properties in the shape of additions to facilities and equipment. The standard return as provided in the proposed bill amounts to something over \$900,000,000 a year. There should be added to this an amount of from \$50,000,000 to \$100,000,000 of net income from other sources. Out of the sum of the standard return and this net income the roads must take care of war taxes, interest and other fixed charges, and must meet dividend requirements. A large part of what balance is left will undoubtedly be invested in their plant, in the form of additions and betterments. Many of the weaker roads will have no balance for improvements, so that improvements out of the standard returns will necessarily represent amounts expended by the more prosperous roads out of their own balances on their own properties. Even for strong roads, the money available for additions and betterments out of the standard return will almost certainly be insufficient for necessary additions to the plant during the period of control, and this will be the case, *a fortiori*, with the roads that have no balance. In other words, the weaker roads certainly, and the stronger roads probably, will be forced to secure new capital for needed additions to their plants.

While there is no absolute distinction between improvement work financed by sale of securities and that paid for from net earnings, yet improvements charged to earnings are usually of the kind represented by increasing the weight of rail, the size of cars, the weight and tractive power of locomotives, and adding more ballast, more ties, and the like—in short, an aggregate of many small improvements; while improvements financed by security issues are usually large-scale additions to the plant, such as the construction of new lines or branches, the purchase at one time of a hundred new locomotives or a thousand new cars, or the construction of a completely new terminal.

If the foregoing reasoning is correct it follows that considerable new capital must be raised during the period of government control, and that such new capital must be expended upon the many additional facilities that the demands of war traffic and general war conditions will call for. Briefly summarized, such facilities will comprise principally the following:

Terminal facilities. These are needed as much as any other kind of facility.

Additional tracks, especially in terminal yards and at concentration points.

Additional lines into port terminals as developed, to new shipbuilding plants demanded by war needs, and to training camps, embarkation stations, quartermaster depots, and the like. Considerable work of this nature was carried on in 1917; it will be needed in much greater degree as the participation of the United States in the war grows greater.

Improved shopping and other working facilities These are needed to keep equipment in order, to conserve man-power, and to enable more work to be produced by each man.

Increased motive power. Even with the locomotives of the American railways in one gigantic pool, and with the diversion of passenger locomotives into freight service, the demands will probably exceed the available supply. High-powered locomotives capable of hauling heavy freight trains will be especially needed, and it will be absolutely essential to add engines of this type to railway equipment.

There must also be a considerable addition to the freight car equipment. The roads will need a considerable number of coal and ore cars, also other freight cars of many kinds.

What will be the aggregate amount and total cost of new facilities and equipment needed by the railways during each year of government control, whether paid for out of standard return or from new capital issues? Clearly any attempt at estimating either the physical units needed, or their aggregate cost, will be but an approximation. Yet we may assume that capital must be forthcoming during each year of government control for 3,000 new miles of track of all kinds—say 500 miles of main line, and 2,500 miles of additional tracks, yard tracks and sidings—and that the demand for new equipment over and above renewal needs will amount to 2,000 locomotives and 50,000 freight cars. The cost of these facilities, and of other facilities that may be required, may be estimated roughly as follows:

500 miles of line @ \$35,000	\$17,500,000
2,500 miles of other track @ \$25,000	62,500,000
2,000 locomotives @ \$75,000	150,000,000
50,000 freight cars @ \$2,500	125,000,000
Other facilities, not less than	200,000,000
Total	\$555,000,000

These rough estimates are all conservatively made, with due regard to current prices and prevailing labor conditions and wages. For example, in arriving at \$25,000 as the average cost of laying a mile of track, no account was taken of the original cost of the land, but merely of the cost of rails, ties, ballast, and track fastenings, the cost of grading and filling, and a very moderate estimate of the labor cost of laying the rail, as follows:

Rail (100 lbs. per yd.) 157 tons @ \$40.....	\$6,280
Ballast (2 ft. deep, 7 ft. wide) 2,740 cu. yds. @ \$1.....	2,740
Ties, 2,000 @ \$1.00.....	2,000
Track fastenings (frogs, switch fastenings, tie plates, bolts, etc.).....	2,000
Grading, filling, etc.....	6,000
Labor cost per mile.....	5,980
Total.....	\$25,000

Miles of line have been estimated at \$35,000 per mile, to allow for cost of land and for buildings that may need to be erected. This is a very low average.

In brief, the best attempt at a guess—for it is nothing more at present—leads to the opinion that the railways of the United States, while under the control of the federal government, will not only be under the necessity of adequately maintaining their equipment and other facilities, including all repairs, renewals, and replacements, with proper depreciation charges, but will also put into their plant each year an amount certainly not less than \$500,000,000—probably more—that will represent additions and improvements to plant. Maintenance charges will be cleared through the operating expense accounts. The cost of additions and betterments must be borne in large part by the issuance of new securities. How these securities shall be financed is no concern of the present inquiry; what does concern us is that for capital account the railways must expend not less than half a billion a year on their properties during the period of government control. This amount is if anything moderate and conservative; only a small part of it can come out of the standard return, while a considerable part must be financed in the open market. It would seem to follow as a logical conclusion that the greater the standard return allowed to the railways, the smaller the amount for which special financing arrangements must be made by the Director General of Railroads. The railways may safely be

expected to invest the largest possible proportion of their standard return in their properties, while the Director General will certainly keep the aggregate of railroad financing at a minimum consistent with efficient operation. Whatever the results of these various efforts, it seems reasonable to conclude that the aggregate amount of capital needed each year will more likely be above \$500,000,000 than below that figure, and furthermore, that a large proportion of this annual amount will call for the issue of new securities.

NOTE.—Since this article went to press, the Director General of Railroads has issued blank forms to all railways, requesting that they be filled out with statistics as to the needs of the roads for new equipment, for additions and betterments, and for new extensions of road or branches. The returns made on these forms, when compiled, will throw a flood of light on the problem which I have attempted to picture in its broad outlines.—J. H. P.

ADJUSTMENT OF LABOR'S DEMANDS DURING FEDERAL CONTROL OF RAILROAD OPERATION

BY GLENN E. PLUMB

LEGAL STATUS OF RAILROAD PROPERTIES

Railroads are public highways, so declared by the various state constitutions, and so held by the Supreme Court from the beginning of railroad history. They are in the nature of things public highways to be used in a particular manner, but highways devoted exclusively to public use, and over which the public have an indefeasible right of transportation. Under the terms and conditions prescribed by law the operation of railroads as public highways is purely a function of government, the exercise of which has been delegated by the various states to the corporations which they have created for that particular exclusive purpose. All of the property which railroad corporations have been permitted to acquire under the terms of their charters is held subject to the perpetual right of passage retained by the public. Public highways are matters purely of public concern, in which no private property interest can exist, except such interests as have been conferred by legislative enactment. The extent of these private interests must be determined from the terms of the grants under which they have their existence. All interests in public highways, which are not included within the grant which the legislature has made, remain in the public. All of the functions which railroad corporations exercise under their charters are delegated governmental functions.

There are naturally three separate and distinct interests in railroad properties: the interests of labor, the interests of capital, and the interests which the public have retained in this property which has been acquired solely for public use. Labor's interests are inherent, not based on grant or legislative enactment, save for those rights which are protected by remedial legislation. Labor has the right to demand, and the public interests require that it shall obtain, sufficient remuneration to attract men of the required intelligence to offer their employment in the service, and to provide

sufficient inducement to retain these men in the public service. The interests of capital are protected by contract and based on legislative and charter grants. Under such grants capital is entitled to receive a fair return for its use in the public service, and this fair return must be so construed as to afford sufficient inducement to attract capital to the public service and to retain it permanently in that service. The public interest requires that the tax levied in the shape of tolls and charges shall produce an amount sufficient to satisfy the interest of labor and provide the agreed returns on capital, in addition to protecting the integrity of the investment through proper maintenance and renewal charges. The public interest is entitled to protection against the imposition of tolls and charges in excess of the rates necessary to produce an income which shall satisfy the requirements of labor and of capital.

EXTENT OF LABOR'S INTERESTS IN RAILROAD PROPERTIES

I wish to outline, briefly, the extent of labor's interests in railroad properties: *first*, as to the number of citizens directly affected by such interests; and *second*, the amount and importance of the financial interests involved.

There are approximately 1,700,000 men employed in railroad operation within the United States. Allowing three dependents to each worker, 6,800,000 are directly dependent upon railroad operation for their livelihood. This is about one-sixteenth of the population of the continental United States. This proportion of the total population is therefore more directly interested in the solution of railway problems than the rest of the entire citizenry of the country.

The public paid in wages and salary to the 1,700,000 men who operated these railways, in the year 1916, the sum of \$1,500,000,000. For the use of capital in the same year there was paid, in dividends and interest, the sum of \$827,000,000. The owners of the money which was devoted to railway service of the public have capitalized their investment at \$21,000,000,000. If the return paid to labor were capitalized on the same basis, it would represent a labor investment of upwards of \$37,000,000,000. This actual labor investment is nearly double the amount for which the actual money investment has been capitalized. The capitalization of the money investment, however, does not actually represent the number of

dollars employed in the public service, but represents merely the par value of the securities which have been issued against an actual investment of dollars which is very much less in amount than that which the face or par value of the securities purports to represent.

The number of dollars actually employed in the service of the public in railroad operation, and entitled by reason of that service to receive a return in interest or dividends, corresponds, in principle, to the number of men employed in this service, and entitled to receive compensation in the form of wages or salaries. It is just as much a fraud against the public to pad the dollar payroll in such a manner as to require an increased exercise of the state's delegated power of taxation, in order to pay a return on such a padded capital payroll, as it would be to pad the wage payroll.

In the present situation there is no padding of payrolls for the advantage of labor. No fictitious names appear on such payrolls. No amounts are paid out for services which are not actually rendered. The number of men employed, the hours, days, or months of their service, are definitely ascertained. The amounts which they receive for the services actually rendered are known with great certainty. The public are not defrauded by the payment of wages for fictitious employees who render no service.

It is not so with capital. We do not know the number of dollars actually invested and which at this time are employed in the service of the public. We only know that the capital payroll purports to represent \$21,000,000,000, which are alleged to be serving the public, but it is admitted that \$4,000,000,000 of this amount is duplicate capitalization, and it is also admitted that the remaining \$17,000,000,000 of securities do not in all cases represent the actual number of dollars devoted to the public service,—as in the Alton case. Its capitalization is \$121,000,000, yet Mr. Harriman admitted, when on the stand before the Interstate Commerce Commission, that \$60,000,000 of these securities outstanding did not represent a single dollar of property or investment. The most conservative defender of railroad securities will not attempt to defend the Alton capitalization, and it is severely condemned by railroad financiers themselves, but it is so condemned only because the facts in the case have become established. The record is known, and while not all railroads have practiced the same frauds, to the same extent, few railroads are free from this taint in their financiering;

and many railroads equal, or exceed, in the extent of the frauds which they have perpetrated, the known facts in the Alton case.

Labor is capital. The engineer who commands and is paid a wage of \$1,200 per year performs a service exactly equivalent in importance to the public as does the investment of \$20,000 for which the public pays a return of 6 per cent per year. The capital investment and the labor investment are identical in worth and importance. The one is entitled to as much protection as the other. Neither is entitled to any advantage or privilege denied to the other, but so long as a capital investment of \$20,000 is permitted to masquerade as an investment of twice that amount, and to receive for its services a double wage, by means of fictitious bookkeeping, capital does receive an advantage which is denied to labor, and that advantage must represent a corresponding loss or burden which either labor, the public, or both, must bear.

Heretofore when labor has approached capital as its employer and asked for a betterment of working conditions, or an increase in the compensation to be paid for its services, capital has always replied:

The rates which we may charge the public for the use of our property are fixed by law. We cannot increase our returns without legislative enactment. The net returns now secured under existing rates are not sufficient to give us a reasonable return upon the amount for which we have capitalized our investment, therefore, we cannot increase your wages, unless you can procure for us a corresponding increase in rates.

These rates, and any increase thereof, must be borne directly by the public, so that the labor organizations, in seeking to obtain better wage conditions, have always been placed in direct opposition to the public interests. It has always been made to appear that the laborer, through his organization, was seeking to obtain a benefit for himself at the expense of the public.

Whenever capital has consented to increase the wages of labor it has immediately sought to secure an increase in rates, upon the ground that more money was needed to meet the increased operating expenses, and that as the net returns were not sufficient to pay reasonable dividends on the number of dollars then expressed as being in the public service, the increased cost of wages must be met by an increased rate of charges.

The carriers have been strenuously contending that all of the

profits which they can make under rates fixed by law are the exclusive property of the owners of the money invested in the enterprise; that the amount of such net profits represents the value of their properties; and that they are entitled to capitalize the value so determined. They further contend that they are entitled to establish such rates as will protect the value so determined.

If this be true, then the greater their net receipts, the greater the value of the interest which they claim in such properties. Any value which accrues to them by reason of a rate increase would be a property right, protected by the Constitution, and could not be diminished by an increase in wages made by direction of the government, without depriving them of the value of their so-called property right. The evil of the situation lies in the uncertainty as to the extent of the private interest which belongs to the owners of the dollars invested in such properties. If that interest were ascertained and made definite, the evils of the old system of railroad operation would be very greatly corrected. There must be a determination of the actual number of dollars invested in such properties. We must know how many dollars are employed in the public service, and what reasonable return they are entitled to receive. When these facts are judicially ascertained, then we can limit the taxing power so that no more than the necessary amounts of money shall be provided. If more is provided we can require that the excess, which the public has paid, shall be devoted to the public use in such manner as not to increase private interests. If such excess be expended in betterments or additions to property, then the value of these betterments or additions is a part of the value of the public interest. It is not to be added to the value of the private interest. If it be just, such excess earnings can be applied to increase wages without increasing rates or diminishing rates without lessening wages.

WHAT ARE THE EXACT RIGHTS OF CAPITAL IN RAILROAD PROPERTIES?

The railroad labor organizations have determined that in the interest of labor the exact rights of capital in railroad properties must be definitely ascertained. These organizations believe that this is also in the interest of the public, and this must be done whether the railroads are to be operated under governmental con-

trol or are to be returned to private operation, subject to governmental regulation.

The government has now reassumed to itself its proper function of operating these public highways. However, it is obligated to pay to the corporations, to whom the government had delegated the exercise of these functions, what is entitled "just compensation." This "just compensation" has been arbitrarily assumed to be an annual amount, equivalent, as nearly as may be, to the average annual net operating revenues for the years 1915, 1916 and 1917. No attempt has been made to ascertain whether or not this so-called "just compensation" is sufficient to meet the legal demands of capital, or is more than enough to pay compensation for the amount of money actually devoted to the public service. If it is not enough we should know it. If it is more than enough the public are being unjustly taxed, and if the public are being unjustly taxed for the benefit of capital, it becomes correspondingly more difficult to increase this tax to meet the just demands of labor. The necessity for a final determination of the amount of money required to meet the lawful demands of capital is greater, if possible, under government control than it would be under private operation.

Labor recognizes that an existing property right cannot be taken away by new legislation, without making just compensation for the value of the right. All existing rights must be determined under existing laws. We are firmly convinced that the laws, as they are now written in the constitutions and statutes of the various states, as construed by their supreme courts, and the Supreme Court of the United States, do afford an ample and sufficient basis for the determination of such rights. These laws do provide: (1) that railroads are public highways; (2) that the operation of a public highway is a governmental function; (3) that railroad corporations are agencies created for the exercise of these governmental functions; (4) that no private property interest can exist in a public highway, except that which is based upon a legislative grant; and (5) that corporations cannot acquire or assert against the public any property interest, right or privilege, except those which have been granted by their charters, or the laws under which they operate.

If these premises are to be accepted, it necessarily follows that the extent of the property interests which corporations may enjoy,

in the public highways which they operate, must be determined from a study of the charter provisions under which they have acquired these properties, together with the limitations imposed by the laws of the jurisdiction within which they operate.

RIGHTS OF CAPITAL MUST BE DETERMINED BY CHARTERS AND LAWS

The limitations of this article preclude anything more than an outline of the theory above stated. The privilege of issuing railroad securities is a corporate franchise. The limitations imposed upon this privilege are expressed in the grant, or the laws under which the grant was made. Corporations, being creatures of statute, do not receive their franchises from the common law, but the common law has imposed many limitations upon the powers of corporations—limitations which the experience of mankind, under the English system of government, has found necessary in order to preserve public rights against the encroachment of granted privileges. Among these limitations so imposed by the common law is the principle that unless directly authorized to do so by its charter, the corporation may not issue stocks or bonds of a par value in excess of the amount of money actually paid into the corporation, as a guaranty for the performance of its franchises. This is perhaps best exemplified by the decision of the Supreme Court of Alabama in *Commercial Fire Insurance Company v. Board*, 99 Ala., 1 at page 4, where the Court said:

Capital stock is the sum fixed by the corporate charter as the amount paid in, or to be paid in, by the stockholders, for the prosecution of the business of the corporation, and for the benefit of corporate creditors. The capital stock is to be clearly distinguished from the amount of property possessed by the corporation. . . . At common law the capital stock does not vary, but remains fixed, although the actual property of the corporation may fluctuate widely in value, and may be diminished by losses, or increased by gains. . . . When we speak of capital stock of a corporation we are understood to refer to the sum subscribed in its organization. When we speak of stock we mean the certificate issued by the corporation to the shareholders, which certificates, like titles to property, furnish the evidence of ownership of the shares of stock. Capital stock is the aggregate of money or other valuable things contributed or paid into the common treasury, as condition of the exercise of corporate functions, and a security for their faithful and prudent exercise. It is the property of the corporation, charged with a trust, it is true; but nevertheless, in its possession and control.

This common law requirement, that the amount invested in the exercise of the corporate franchise should be the exact equivalent of

the par value of the corporate securities issued, was, in the early years of railroad history, modified to some extent by the different state legislatures. The abuses resulting from the legislative privileges so granted became so scandalous that, beginning with Illinois in 1870, the people of the various states, through their constitutions, restored this old common law limitation to its former vigor and effect and at the same time deprived the legislature of any power in the future to in any way abate this requirement.

Railroad history began about the year 1830. This common law limitation upon the privilege of issuing stocks and bonds was then fully recognized. Railroad builders recognizing this limitation and faced with the difficulty of financing their promotions if held to this strict letter of the law, began to include in the charters which at that time were directly granted by legislative enactment, provisions authorizing them to issue their stocks and bonds for a consideration less than par. In many instances these charters specifically provided that such securities might be issued for any price the directors saw fit to accept and that, when so issued, they should have the same validity as though issued at par. The legislative authority so conferred upon these corporations was in abrogation of the common law and undoubtedly made legal the issuance of what would otherwise have been fictitious securities.

At the close of the Civil War, although we were then in the early stages of railroad development, there had been many scandalous emissions of watered securities which called forth a tremendous popular protest. At that time the railroads claimed that they had a right to earn a reasonable return upon the par value of the securities so issued. Many of the states faced this problem in the constitutional conventions called to frame new constitutions. Illinois, in 1870, adopted its present constitution in which it embodied the following provision:

No railroad corporation shall issue its stock or bonds except for money, labor, or property actually received and applied to the purpose for which such corporation was created. Any stock dividend, or other fictitious increase of capital stock or indebtedness shall be void.

The right asserted by the railroads at that time was that they had conferred upon them by their charters the right or privilege of charging such toll as would afford them a reasonable return upon the

par value of the securities which they had issued. In the constitutional debates, this assertion of right was met by the declaration that in order to prevent unjust taxation the people would provide in their constitution that the issuance of securities must exactly correspond with the actual investment made, in order that the returns received by the holders of such securities might be accurately known to the public and in order that the power of regulation might be intelligently exercised. At that time no railroad company had ever asserted that it was entitled to receive a return upon the value of its property.

In the Illinois constitutional debates, Judge Elliott Anthony in discussing the proposed adoption of the provision limiting the issuance of securities, said:

I wish to explain for a moment where the evils come into the community by the increase of the capital stock. The managers care nothing about the public, but in order to keep up the stock, they raise the rates of freight in order to declare dividends upon the watered stock. It is a fact well known that the moment these managers, who care nothing for the public, get control of the railroads and its earnings, they use them for the purpose of making money and stock manipulating. Rates are increased largely, by which they seek to make their watered stock pay dividends and keep it up in the market, and the injury to the public is very great.

Shortly thereafter Pennsylvania incorporated a like provision in its new constitution, and Mr. Howard, in addressing the convention in the debates on this provision, said:

But hereafter it should be known that the stock will not be allowed to be increased without limit. We should know that the stock is to be used for a legitimate and a valuable purpose; that it is to build railroads; that the issue of stock is necessary to build them, and that it is not the intention to water the stock or increase it unnecessarily. After this stock is increased it must be made to earn dividends; it must make its proper interest, and the people of the Commonwealth must be taxed in the price of transportation for the purpose of raising money to pay dividends on that stock, and, therefore, it is the right of the people to know that those issues of stock are necessary and that the proceeds are to be used for legitimate and proper improvements.

In the Kentucky constitutional debates, in discussing a like provision, Mr. Clardy said:

Now, it is a fact that a great many corporations in this State and elsewhere would show a much larger dividend, and the people would be able to see to what extent they had been imposed upon by these corporations, if it was not for the fact that the stock represents something which really does not exist, and this we seek to avoid in this fifth section.

Space will not permit me to go further into this phase of the historical development of constitutional provisions. Enough has been shown to demonstrate that the people, in the adoption of these provisions, clearly intended to compel railroad companies to make the par value of the securities issued by them coincide with the amount of investment made by the subscribers to such securities, and that the corporation's right or power to tax the people by the imposition of tolls and charges should be strictly limited to such exercise of that power of delegated taxation as would procure a reasonable return upon the investment which the subscribers to such securities had made in the corporation.

This constitutional provision has been embodied in nearly every new state constitution adopted since 1870, with the exception of the states of New York and Ohio, and in Ohio similar provisions are embodied in that portion of the constitution authorizing the creation of the state utilities commission.

In many other states in which no new constitutions have since been adopted, like limitations have been established by legislative enactment. The effect of this constitutional provision was to restore to full force and vigor the former common law limitation imposed upon all corporations, and it had the further effect, in the various states which had adopted this provision, of depriving the legislature of any power thereafter to remove the limitation so imposed. The Supreme Court of Illinois, in the case of *People v. Union Consolidated Elevated Railway Co.*, 263 Ill., 32, held that by this provision of the constitution:

The State retains the right to regulate rates charged by railroads, but it has not the power to fix tolls or charges at so low a rate as to destroy the investment or deprive the Company of its right to a reasonable return on the investment.

This constitutional declaration that issues of securities of a par value in excess of the investment actually made and applied to corporate purposes should be void now prevails in some 26 states. The common law prevails in all states except Louisiana and some code states, but in Louisiana the constitution prescribes the same limitation and in many of the code states like provisions have been supplied by the legislature. In many states that have not adopted new constitutions since 1870 this limitation has been imposed by statute. The purpose of this limitation, as construed by the Supreme Court of Illinois, was to preserve in the state a right to regulate the use of

these highways, provided that in such regulation the state did not deprive the carrier of its investment or a fair return upon the investment.

The full extent of the private interest which the legislature has granted to carriers in public highways, under such a limitation, is measured by its investment devoted to the public service, and any regulation of the use of the highways which preserves to the carrier the integrity of its investment and a fair return upon that investment secures to the corporation all of the rights which are guaranteed to it by the constitution.

LABOR'S DEMANDS CAN BEST BE ADJUSTED AFTER CAPITAL'S
RIGHTS ARE DETERMINED

The determination of the extent and value of the rights which have been granted to railroad corporations is a judicial question. The federal government needs only to provide a forum for the determination of that question, before whom all corporate interests may be presented. Such a determination will forever settle the extent of the private rights in our great national highways. Upon such a determination the demands of labor can be fairly adjusted without the antagonism of the owners of capital, and without undue popular disfavor. Organized labor is earnestly seeking to procure such a determination. We believe that the public interest requires that this should be done.

If this can be brought about a sound basis will have been laid for future regulation and even for governmental acquisition, if in the course of time the people should demand it. When these rights are so ascertained, the speculative element in railroad securities will have been eliminated. Investments made therein by widows, orphans, insurance companies and savings banks will be as safe as though they rested upon governmental securities. Until this is done labor will be restless, capital will shrink from a venture that does not offer adequate security, and the sovereign powers of governmental regulation must be clouded with doubt and uncertainty, and forever hindered by litigation.

PRECEDENTS FOR PRIVATE OWNERSHIP AND GOVERNMENT OPERATION OF TRANSPORTATION FACILITIES

By DELOS F. WILCOX, PH.D.

PRIVATE OWNERSHIP AND GOVERNMENT OPERATION IN EUROPE

A report issued by the British Board of Trade in August, 1913, in response to an order of the House of Commons, dated December 14, 1911, is entitled "State Railways (British Possessions and Foreign Countries)." This document gives certain statistics as to the ownership and operation of railways outside of Great Britain as shown by the latest reports then available. The railways are divided into four classes: (1) publicly owned and operated; (2) privately owned but publicly operated; (3) publicly owned but privately operated; (4) privately owned and operated. The total mileage recorded in this report is 594,909. If to this is added the railway mileage of the United Kingdom, the total will be brought up to approximately 650,000 miles, of which about 250,000 miles are in the United States. Classified according to ownership and operation the entire railway mileage of the world at the beginning of the war would be distributed approximately as follows:

Publicly owned and operated, 164,057 miles, or 25.2 per cent

Privately owned but publicly operated, 11,030 miles, or 1.7 per cent

Publicly owned but privately operated, 35,244 miles, or 5.4 per cent

Privately owned and operated, 440,016 miles, or 67.7 per cent

Total, 650,347 miles

It will be seen from these approximate figures that prior to the war only about 11,000 miles, or less than 2 per cent of the railway mileage of the world, was in the peculiar status of being privately owned and publicly operated. The situation has since been radically changed by military exigencies, for the assumption by the governments of Great Britain and the United States of the operation

of their privately owned systems has put about 300,000 miles, or almost one-half of the total mileage of the world, in this class. The available data with respect to pre-war precedents for state operation of privately owned railways are meager. The British report to which I have referred distributes the mileage then in this category as follows:

- Austria, 3,593, or 25.5 per cent of its total mileage
- Hungary, 5,771, or 44.7 per cent of its total mileage
- Belgium, 151, or 5.2 per cent of its total mileage
- Denmark, 61, or 2.66 per cent of its total mileage
- France, 229, or .9 per cent of its total mileage
- Norway, 1,225, or 69.9 per cent of its total mileage

It will be noted from the above that the only country in which more than 50 per cent of the railways fell within this category was Norway, and here the preponderance of public operation and private ownership was so great as to make this the characteristic plan for that country. As against 1,225 miles privately owned and publicly operated there were only 396 miles publicly owned and publicly operated and 296 privately owned and privately operated. While Austria and Hungary each showed a considerable mileage privately owned and publicly operated, this arrangement cannot be said to be the characteristic one for either of these countries. Austria had 8,074 miles of publicly owned and operated lines, and 2,409 miles of privately owned and operated lines as compared with the 3,593 miles of privately owned and publicly operated lines. In Hungary there were 5,063 miles publicly owned and operated and 2,058 miles privately owned and operated as compared with 5,771 miles privately owned and publicly operated. In the other countries, Belgium, Denmark and France the proportion privately owned and publicly operated was so small as to be practically insignificant. I have not found a full explanation of the situation in Austria and Hungary, but I take it that the privately owned lines operated by the state were held under lease, and were operated in conjunction with the publicly owned lines just as one railroad corporation frequently incorporates in its own operating system lines leased from other companies. I see nothing in this plan that can properly be regarded as a precedent for the present arrangement in Great Britain and the United States. When we come to an exami-

nation of the situation in Norway we find here also that what on its face appears to be a precedent is not one in fact; for the government of Norway had a preponderant interest in the railways which were classed as privately owned. The total capital invested in these lines was shown to be £10,936,011, which was distributed as follows with respect to the sources from which it was derived:

From the state (shares and loans), £8,413,021, or 76.9 per cent

From communes and individuals (shares), £1,084,526, or 9.9 per cent

From outside loans, £273,632, or 2.5 per cent

From earnings £1,164,832, or 10.7 per cent

These figures show that governmental operation of privately owned lines in Norway was merely public operation of railways which had been heavily subsidized by the government and which were doubtless soon to be exclusively owned by it. This does not furnish a precedent for public operation of privately owned lines in the sense in which this is now being carried on in Great Britain and the United States.

It may be said, therefore, that the working out of a correct policy under the circumstances now prevailing in the United States must be undertaken without much help from direct precedents. The available published information with respect to the experience of Great Britain during the past three years is too meager, and the final results are at the present moment too uncertain to give the American public much satisfactory guidance. No doubt many Americans who, in connection with the work of the war, have had an opportunity to observe and secure knowledge of the practical results of government operation in Great Britain may be in a position to reach conclusions satisfactory to themselves, based upon British experience, and of course it is to be hoped that the United States government, through its intimate relations with the British government during the war, will be able to make advantageous use of the results of England's experiment.

STREET RAILWAY PRECEDENTS FOR PRIVATE OWNERSHIP AND GOVERNMENT OPERATION

Before entirely giving up the search for adequate precedents, it may be well to examine the forfeiture provisions of some of the

more recent street railway resettlement franchises and contracts which have been worked out in certain American cities.

The Chicago resettlement ordinances of 1907 set the standard in many respects for "modern" street railway franchises in the United States. The ordinance of the Chicago Railways Company had certain provisions of considerable interest in connection with this discussion. It provided that within three years after its passage the company should perfect its title to the entire street railway system then being operated by the receivers of the Chicago Union Traction Company, and should free this system from any lien or encumbrance other than those created under its express authorization. It further provided for the immediate rehabilitation of the system, and for the distribution of the gross receipts. After operating expenses and taxes had been paid, a sum equivalent to 5 per cent of the fixed purchase price of the street railway system was to be retained by the company, and the net receipts remaining thereafter were to be divided in the proportion of 45 per cent to the company and 55 per cent to the city, the city having the right upon proper notice, at any interval of six months, to purchase and take over the property at a price fixed in the ordinance, plus the cost of additions, extensions and betterments made subsequent to its going into effect. Section 25 of the ordinance established a special remedy in case of the company's default in perfecting its title as required, and provided that in such case the city might take possession of and operate the system upon terms and conditions quoted in the footnote.¹

¹ If, at any time, the Company shall be in default with respect to the obligation expressed in subdivision (d) of Section 1 of this ordinance in regard to perfecting title to its property and removing liens and encumbrances therefrom, the Company shall, upon demand, surrender to the City possession of its entire street railway system and the City may enter into possession thereof and of each and every part thereof, maintaining, operating, improving or extending the same, and keeping up the funds described in Sections 16 and 18 of this ordinance, in all respects as the Company might do, and as the Company would be obliged to do, if in possession under the provisions of this ordinance, until the obligation of the Company under said subdivision (d) of Section 1 of this ordinance shall be completely performed, or until the City shall purchase said property, or cause the same to be purchased by its licensee, as in this ordinance provided. Until the happening of one of the events last mentioned, if the City in its absolute discretion shall so elect by notice in writing delivered to the Company, the continuance of the Company in possession shall be subject to the obligation of applying its net

It will be noted that the provisions therein quoted relate to a special default. The general provision of the ordinance with respect to default is to the effect that if such default is continued for a period of three months, exclusive of all times during which the company is delayed or interfered with without its connivance by unavoidable accidents, labor strikes, or the orders or judgments of any court entered in any suit brought without its connivance, the city shall be entitled to declare the ordinance and all the rights and privileges of the company to maintain and operate street railways in any of the streets or public ways of the city to be forfeited and at an end. The ordinance stipulates, however, that if the company

receipts as hereinafter in this Section provided until the City elects to take possession as in this paragraph provided.

If, in the event of such default, the City elects to take possession of said property, the Company shall be bound to provide funds sufficient to fulfill all its obligations in respect of extensions, improvements, reconstruction, equipment, re-equipment, and additions to said system of street railways and the contribution of moneys toward the cost of subways and extensions thereof, as though its possession of said system of street railways had not been interrupted.

Whether in case of such default the City elects to take possession or to leave the Company in possession, in either event the receipts of said system of street railways shall be applied as hereinbefore in this Section provided, except that the proportion of net receipts which by this Section the Company is authorized to retain for its own use and benefit shall be paid over to a depository as in this Section provided, to be, by such depository, applied in accordance with the provisions of this ordinance next hereinafter set forth to remove any defect of title or any lien or encumbrance, other than such as are herein expressly authorized to be created, which may exist with respect to said system of street railways.

To the extent that the City shall proceed to exercise the powers, or any of them, mentioned in subdivision (c) of Section 1 of this ordinance, said moneys shall be paid out by the depository upon the certificate of the Mayor of the City and upon the order of such disbursing officer or agent as the City may designate, to provide funds with which to pay the purchase-price of property acquired by the City pursuant to said subdivision, or to indemnify the City for expenses incurred in the exercise, or attempted exercise, of its powers, as in said subdivision provided. In the event that the City shall elect to leave the Company in possession of said property as aforesaid, the City shall have the additional right to require the depository, upon like certificate and order, to pay out said moneys for any or all the purposes aforesaid in the absolute discretion of the City, irrespective of the limitations contained in said subdivision (c) of Section 1 of this ordinance. Such certificate of the Mayor shall be conclusive evidence to the depository of the facts therein stated.

The depository may also pay out said moneys upon the order of the Company

pledges or mortgages its property or franchises granted by the ordinance for the security of loans maturing not later than the date when the ordinance expires, the amount of such loans not being in excess of the purchase price of the system, the right of forfeiture accruing to the city by reason of the company's violation of the provisions of the ordinance shall not be asserted or exist against the mortgagees and shall not impair or affect their right to recover by legal process against all the property of the company, including the rights granted by this ordinance up to a sum not in excess of the purchase price.

The dual subway contracts executed by the Public Service

for the acquisition or extinguishment of any outstanding title, estate, interest, lien, encumbrance, claim or demand, constituting a defect of title of the Company's property, but no such payment shall be made on the order of the Company without (20) days' previous notice in writing to the City Comptroller of said City, which notice shall specify the particular title, estate, interest, lien, encumbrance, claim or demand to be acquired or extinguished, and the name of the holder or holders thereof, to whom payment is proposed to be made and the amount of such payment. A certified copy of a resolution of the board of directors of the Company, requesting such payment and stating the facts claimed to justify the same, shall be conclusive evidence to the depositary of the facts so stated, in the absence of notice of objection by the City, as next hereinafter provided. If, within said period of twenty (20) days, the City, by notice in writing delivered to the depositary, shall object to such proposed payment and shall agree to waive any default, or supposed default, by reason of the existence of such alleged title, estate, interest, lien, encumbrance, claim or demand, and to take title or cause its licensee to take title to said system of street railways subject thereto in the event of purchase by the City or its licensee, pursuant to the provisions of this ordinance, then and in that event the depositary shall not make the payment referred to in such notice given to the City by the Company, but shall set apart out of the proportion of the net receipts aforesaid in its hands and shall hold an amount equal to such proposed payment upon the specific trust to pay the same, with all accumulations to the City in either of the following events namely:

(1) If the City shall, at its own expense, cause the said title, estate, interest, lien, encumbrance, claim or demand to be extinguished or conveyed or transferred to the Company.

(2) If the City shall purchase said street railway system, or cause the same to be purchased by its licensee, as in this ordinance provided, and shall take title to said street railway system subject to such outstanding title, estate, interest, lien, encumbrance, claim or demand without deduction from the purchase-price on account thereof.

At the beginning and at the end of any such period during which the Company's right to receive or retain for its own use and benefit a portion of said net receipts

Commission for the First District on behalf of the City of New York, March 19, 1913, provide for the construction and equipment of rapid transit railways by the use of funds furnished in part by the city and in part by the company, and for the lease of these railways when completed, to the Interborough Rapid Transit Company and the New York Municipal Railway Corporation, subject to the city's right, upon the expiration of a period of ten years from the date of the commencement of operation, or at any time thereafter, to terminate the leases and take possession of the property for public operation upon paying the companies the amounts then due them on account of their investment, and the obligations of the contracts. The leases, unless sooner terminated, run for a period of forty-nine years, and the contracts provide that within that time the original contributions to capital made by the companies shall be amortized out of earnings, so that the purchase price of the property, starting at a maximum when the city's right to purchase accrues at the end of ten years, will gradually decrease to nothing (except for the unamortized portions of capital supplied by the companies for equipment in addition to the initial equipment required by the contracts) at the expiration of the leases. These contracts, like the Chicago

shall have been suspended, as hereinbefore provided, there shall be an accounting in respect of the receipts of said street railway system, to which the depository shall be a party, substantially as provided in Section 25 of this ordinance with respect to the annual account; and any balance of net receipts in the hands of the depository not expended as aforesaid, accruing prior to the expiration of such period shall be paid to the City, if the City was in possession during such period, or to the Company, if the Company was in possession during such period, and the Company shall be entitled to receive at the time and subject to the conditions hereinbefore in this Section and Section 18 set forth the share of said net receipts hereinbefore mentioned, accruing after the expiration of such period.

If the City shall enter into possession of said system of street railways, as in this Section provided, it may retain such possession for not more than six months after said title to said system of street railways is perfected as aforesaid and after receiving six months' notice thereof in writing from the Company; and if, while in possession under the authority of this Section, the City shall give notice of its intention to purchase said street railway system of the Company, or to cause the same to be purchased by its licensee at the next succeeding date at which such purchase could be made under this ordinance, the City shall be under no obligation thereafter to surrender such possession by reason of such title having been perfected, unless the City or its licensee shall fail to consummate the purchase at the time specified in such notice.

ordinances, provide for the distribution of the gross receipts, and prescribe the priorities in even greater detail. It is sufficient for our present purposes to state that after previous rental obligations, taxes, operating expenses, maintenance and depreciation have been provided for, the companies are to receive compensation equivalent to their average net profits during a period prior to the date of the contracts, and interest at the rate of 6 per cent per annum upon the new capital supplied by them under the terms of these contracts. As the next deduction from the gross receipts the city is to receive a return upon the portion of the capital which it has contributed to the joint enterprise. Next, a deduction is to be made for the establishment of a contingent reserve fund, and the net amounts remaining after the various deductions described are deemed to be "the income, earnings and profits" of the rapid transit systems, and are to be divided in the proportion of 50 per cent to the companies and 50 per cent to the city.

Our particular interest in these contracts in connection with the present discussion has to do with the remedies provided in case of the default of the companies in paying over the amounts due to the city from the gross receipts, or in case of the failure or neglect of the companies to observe and fulfill the conditions and obligations of the contracts. In such a contingency the city has a choice of remedies, but the one in which we are at present interested is set forth in the Interborough Rapid Transit Company's Contract² as follows:

In case of default of the Lessee in paying the rental herein provided or in case of the failure or neglect of the Lessee faithfully to observe, keep and fulfil any of the conditions, obligations and requirements of the Lease, the City, by the Commission upon thirty (30) days' notice to the Lessee of its intentions so to do may serve notice of such default upon the Lessee, directing the Lessee to cure the default within ninety (90) days. If there shall be any dispute as to the fact of default or as to the remedying thereof the Lessee may apply to the Court. If the default be not remedied within such time or within such further time as may be allowed by the Commission or by the court, the City shall thereafter be at liberty to enter upon and as the agent of the Lessee operate the Railroad and Equipment and Existing Railroads and Existing Equipment at the rate of fare and in the manner provided in the Lease for the remainder of the term, or to enter into a contract, subject to the same conditions, with some other person, firm or corporation to operate the Railroad and Equipment and the Existing Railroads and

² Contract No. 3, Article 89.

Existing Equipment as the agent of the Lessee for such period of time as the City may elect. It shall be a condition of such further operation by the City or by the person, firm or corporation with whom or with which the City may contract, that the revenue otherwise distributable to the Lessee under paragraphs 6, 7, 8 and 9 of Article XLIX hereof shall be devoted to the payment of interest and sinking fund charges, if any, upon bonds issued by the Lessee for the purpose of Construction and Equipment under this contract and for the purpose of refunding bonds issued upon the lease of the Existing Railroads and upon the Existing Equipment, and any balance thereof after the payment of such interest and sinking fund charges and after the payment of damages suffered by the City by reason of such default and unpaid by the Lessee from other sources shall be paid to the Lessee. If the City or such other person, firm or corporation shall fail to pay the charges above referred to and if the City shall not terminate this contract as provided in this chapter, the Lessee shall be entitled to regain possession and to resume operation of the Railroad and Equipment and the Existing Railroads and Existing Equipment.

The street railway franchise granted in 1914 by the City of Kansas City, Missouri to the Kansas City Railways Company also contains provisions for the seizure of the street railway system by the city, as a penalty for the company's non-compliance with the terms of the ordinance, and for its operation by the city for the benefit of the parties having a financial interest in it. As an example of the peculiarities of forfeiture where vested rights are involved, the Kansas City ordinance provides an interesting exhibit of the characteristic workings of the American mind. Section 52 of this ordinance is as follows:

If the Company shall willfully do or cause to be done any act or thing by this ordinance prohibited, or willfully fail, refuse or neglect to do any act or thing required by its terms, it shall forfeit all rights and privileges conferred upon it by this ordinance, but such forfeiture shall not affect the right of mortgagees and those claiming under the Company to capital value and return thereon, as herein provided. Such forfeiture may be had by proceedings by the City in its own name or that of the Prosecuting Attorney or Attorney General in the Supreme Court of the State, or if that court declines to assume jurisdiction, in any other court of lawful jurisdiction. *Provided, however,* before the City shall have the right to begin a proceeding to enforce said forfeiture, it shall give notice to the Company in writing of the specific dereliction or derelictions complained of, and unless the Company shall promptly and with expedition fully remove such alleged cause of forfeiture, the City shall have the right to begin and proceed with the enforcement of said forfeiture.

For a second or subsequent breach of the same provision, the City shall have the right to proceed without further notice, to enforce such forfeiture.

If there be a final decree of forfeiture of the Company's rights and privileges hereunder and the cause of forfeiture be not removed within a reasonable time

fixed in the judgment, then the right of the Company to manage and direct the property shall cease and determine and be forever foreclosed, and 25 per cent of that portion of the surplus income of the Company going to it as participation, from date of such final judgment, shall be forfeited to the City and be put back into the property without adding to or in any wise increasing capital value. Either party may appeal from the decree of the court in the first instance, but if the Company so appeals, then pending such appeal its rights of participation in the surplus income shall be suspended and the funds accumulated by reason thereof sequestered, and if it loses upon such appeal, the fund so sequestered shall be forfeited by the Company and paid to the City. Pending such appeal, the property shall be managed by five trustees, two of whom shall be selected by the Company, and three by the Mayor from the City's directors. If there be no appeal by the Company from a judgment of forfeiture, or if there be an appeal by it which results in an affirmance, then the three trustees designated by the Mayor for the City shall manage and direct the property without any representation by the Company, but such trustees for the City shall continue in the exclusive possession of the property, subject to and under the terms of this ordinance, and shall carry out all its obligations with respect to capital value, return thereon, participation of the parties and the rights of all parties as fixed herein, the Company not having thereafter any right to any possession of any part of the property. In case of any vacancy in the office of trustee named by the City, his successor shall be chosen in the same manner as the City Directors are selected, and in case of a vacancy in the office of trustee named by the Company, prior to final judgment of forfeiture, his successor shall be chosen by the Company.

Should the Company be finally adjudged a bankrupt or insolvent and thus be unable to carry out this contract and perform the obligations imposed upon it thereunder, then such adjudication shall have the same force and effect as an adjudication of forfeiture as above provided.

PRESENT SIGNIFICANCE OF PRECEDENTS FOR PRIVATE OWNERSHIP AND GOVERNMENT OPERATION

Such are the lame and inadequate precedents which have come to my attention for the public operation of privately owned transportation facilities. Precedents are of no value except as they make it easier to take a desired course of action, or as they throw light upon the ways in which a course of action once taken will or may affect other actions to be taken later on. In the present case the President has acted, and the operation of the railroads has been taken over and placed under the jurisdiction of Secretary McAdoo, acting as Director General of Railroads. A discussion of the question as to whether or not this step was justified from the point of view of precedents would at this time be a purely academic one. Now that the step has been taken, and we are in the midst of a stu-

pendous international struggle, it would be a thankless task to make our discussion hinge upon this issue. The real function of precedents is not, therefore, to furnish us with justification for praising or blaming the President for taking over the railroads, but to point out the probable ultimate effect of this step upon public policies, and to show the ways in which governmental operation and the legislative and contractual arrangements about to be made with respect to it may be best adapted to the furtherance of a sound future policy, and the avoidance of mistakes which might otherwise be made.

Public operation of publicly owned enterprises is a general and normal governmental policy, although there are certain precedents in practice and certain considerations in theory which may be cited in favor of the policy of government ownership and private operation. The value of these precedents and the weight of these considerations we need not discuss at this time. The reverse policy of private ownership with public operation is, as we have seen, without substantial precedent, prior to the beginning of the war, and cannot be regarded as a normal or permanently satisfactory arrangement. It is in both Great Britain and America an emergency policy, the outgrowth of unprecedented conditions, in which national security is in the utmost peril. The question on everybody's lips is: Will the railroads ever be permitted to go back to private control? or, Will public operation inevitably develop into public ownership? Up to the present time the United States has no financial interest in the railroads, that is, it has no share in their ownership. I leave the new government railroad in Alaska out of consideration as that is an isolated enterprise which is in no real sense a part of the system of railroads in the United States. It might be urged that in view of the original land grants made by the government to the transcontinental lines, grants which have now come to represent an enormous value, the government has an interest in the railroad investment. This is not true in any legal or practical sense, for the lands received from the government as a free gift are now as much the property of the railroads as any portion of the equipment provided by their own capital. If the government acquires the railroads it will have to buy back its gifts just the same as if it had not been the giver. In this country there is no financial interest held by the government, and no nucleus of publicly owned lines to fur-

nish the normal foundation for government operation. It seems probable that if the present emergency operation leads to government ownership, the latter will be undertaken on a large scale through the purchase of substantially all of the railroads at once or at least as a part of one big scheme. Whether government ownership will actually follow as a consequence of government operation is a matter that can only be determined in the future. The precedents throw no light upon this issue.

The administration bill now pending in Congress provides that the President may enter into an agreement with any railroad, guaranteeing to it as just compensation for the use of its property during the period of federal control an income at an annual rate equivalent as nearly as may be to its average net railway operating income for the three years ending June 30, 1917, and that any net railway operating income in excess of this standard return to the companies shall be the property of the United States. The bill also provides that adequate depreciation and maintenance of the railroad properties shall be included as a part of operating expenses or provided through a reserve fund, in accordance with principles and rules to be determined by the President. As introduced in Congress the bill provides that federal control of transportation shall continue during the period of the war and until Congress shall thereafter order otherwise. The chief controversy with respect to this legislation is now raging about this provision of the bill; the conservatives—those who are strongly opposed to government ownership and operation as a permanent policy—insisting that a definite time limit shall be fixed in connection with the close of the war, when the railroads shall be handed back to their owners. If the administration bill should become law in its original form, and if it should be determined by the effective voice of the nation that government operation is to be continued as a permanent policy, one of two courses would naturally be chosen. Either the government would continue to operate the roads without buying them, in which case it would have to pay the owners a permanent annual rental as fixed during the war period in accordance with the terms of the act, or the government would determine to purchase them, and then it would have to pay a price largely determined by their earning power as fixed in the same way. If, for example, following the close of the war there should be a great slump in the net earnings of the railroads,

due either to a falling off of gross revenues, or to a relative increase in operating expenses and depreciation charges, the government would be in a position where, if it continued to operate the roads without buying them, it would be bound by contract to pay an excessive rental, or if it concluded to buy them, it would have to pay a price largely determined by the capitalized value of an excessive rental. If, on the other hand the average net earnings during the period immediately following the war should be in excess of the earnings during the war period, the government would reap an advantage by the contracts authorized by the act, whether the roads continued to be operated by the government under private ownership or were to be purchased outright. As the price to be paid for a public utility or any other property almost always has great weight in determining whether or not a purchase will be effected, it is possible that the policy of government ownership and perhaps of continued government operation may, if the administration bill is enacted into law and the contracts authorized by it are consummated, be determined in the affirmative or in the negative, according to the way in which contracts and arrangements entered into in time of war and based upon war conditions work out in time of peace. If it should be found that under these war contracts the government had bound itself to pay an excessive annual rental as a condition of continued government operation, or an excessive purchase price as a condition of the acquisition of the railroads, controlling public opinion might be turned in favor of restoring the railroads to their present owners, and perhaps it would not be unsafe to predict that if the roads should be so restored immediately following the war, their subsequent purchase by the government, or the resumption of government operation, would be long delayed by the extreme financial exigencies arising out of the liquidation of the national war debt.

Precedents are lacking, and for that reason they will have to be made. Sometimes to avoid the "intolerable toil of thought" we copy methods or plans which have been adopted elsewhere, but so recently as not to have been subjected to the test of practical operation. I have referred earlier in this article to the forfeiture and default provisions of the street railway franchise contracts recently adopted in Chicago, New York and Kansas City. These provisions have some relation to each other and might be used to a certain extent as a basis for the determination of the policy to be followed by

the government in the operation of the railroads while they remain in private ownership, but no one of these provisions has ever been subjected to a practical test, and therefore they have no particular weight, except as schemes which have appealed to certain groups of men upon whom was thrust at given times the responsibility for solving difficult problems in public relations. It seems to me that in view of the absence of precedents and in view of the extraordinary conditions now prevailing, it would be a great mistake for the government of the United States by legislation or by authorized contracts to fix the annual compensation to be paid to the railroads for the entire period covered by governmental operation without regard to the financial developments in the railroad business in the years following the war. In my judgment it would be better to limit the compensation features of the present arrangement to a definite period, say, until the end of one or two years following the cessation of hostilities, leaving for subsequent readjustment a determination of the earning power of the roads under the conditions prevailing after the war.

GOVERNMENT OPERATION OF AMERICAN RAILROADS

BY CLIFFORD THORNE

The government operation, and possible ownership, of American railroads presents some issues of law and public policy that will be of commanding importance during the next few years. It will be well for every citizen to have a clear grasp of some of the fundamental facts about which this contest will be centered.

Government operation is a great experiment, and is fraught with many possible consequences of the first magnitude. Our object will be to outline briefly some of the essentials of the plan now pending in Congress, how that plan differs from the one adopted in Great Britain, and we will present a discussion of two or three of the principal objections which have been offered to the pending measure, with special reference to the compensation proposed in this greatest financial transaction in the history of the world.

Our object is not to produce an historical monograph for the antiquarian of the future to mull over, nor a dissertation on the many knotty constitutional and other legal problems involved. Both of these tasks would be interesting and instructive, perhaps. But there are a few vital issues of public policy involved in the legislation now pending which present real live questions worthy of the consideration of every citizen, and it is our purpose to discuss these issues. Unless we are gravely in error the railroad question will now be forced into national prominence, surpassing that which it has occupied for many years; and every man who has the responsibility of representing the people on this subject will be called upon at some future time to render a strict accounting for his acts of today.

To understand clearly the discussion and appreciate the relative importance of matters considered it is necessary to have a true conception of the object of taking over the railroads, and what it is expected to accomplish by that act.

At the moment of supreme test, when the public interest demanded the highest efficiency in our transportation system, private operation broke down and the government had to come to the rescue. Precisely the same thing occurred in Great Britain. This

did not happen in the other great civilized countries engaged in the present war, because they had already taken over the operation of most of their railroad systems many years ago. It is a noteworthy fact that not one of these other nations found it advisable to go back to private operation when the crisis came. The only nations which found it necessary to make a change in their methods of dealing with their railroads were those which substituted government operation for private operation.

The incidents leading up to this memorable event in the history of American railroads are interesting. For seven years our railway companies have maintained a national combination for the purpose of forcing general advances in freight rates. During this period several cases involving colossal sums of money have been won and lost. In the fall of 1917 the eastern and western railroads asked the Interstate Commerce Commission for a reopening of the celebrated Fifteen Per Cent Advance Rate Case. In the spring they had lost the case on approximately three-fourths of the traffic in the United States.¹ The sum involved in this one proceeding was stupendous, aggregating approximately four hundred million dollars annually, or 5 per cent on eight billion dollars, which is more money than the total cost of the Civil War. It is difficult for the human brain to comprehend such figures. The sum exceeds that involved in any other case between private parties in the history of civilization. During the course of the year 1917 our government floated a war loan of a little less than seven billion dollars, which has been described as the greatest in human history. Announcement has been made that during the coming year the government will need twenty billion dollars more money for war purposes.

At this critical moment the eastern railroads announced that if the advances they were then asking were granted in full the car-

¹ In 1911 the railroads lost their advanced rate cases completely. In the spring of 1914 they lost the 5 per cent case on approximately 90 per cent of the traffic involved. On rehearing in the fall of 1914 the Interstate Commerce Commission granted the eastern railroads the 5 per cent on approximately 50 per cent of the tonnage involved. In 1915 the western railroads lost their case on approximately 80 per cent of the tonnage involved. In the spring of 1917 the eastern roads were granted a 15 per cent advance on approximately two-thirds of the traffic involved, and the western and southern roads lost their case on approximately everything except coal, coke and iron. These figures are estimates only. Thousands of individual changes in rates have been made from time to time.

riers would come back immediately and request another 15 per cent. The western railroads had just applied for a reopening of their case. The unending cycle of advances, advances, advances, was appalling. The railroads over-played their hand. At this moment the shippers for the first time during all these proceedings from 1910 to 1917 took the position, as one of two or three alternatives, that the time had finally arrived for the government to take over the operation of American railroads. They urged the Commission to make this recommendation to Congress under the provision of the Act to Regulate Commerce requiring the Commission to make suggestions concerning important legislation affecting our transportation system. Within three weeks the Commission made a report to Congress naming government operation as one of the two alternatives which should be adopted by the government, and within six weeks the President took over the railroads.

Immediately after the suggestion of government operation was made by the shippers the proposition was bitterly fought by the railroads. Interviews against the measure were given out by leading railway executives. Newspapers and magazines with well recognized railroad sympathies, severely criticised the proposition.

When the government operation of railroads appeared inevitable the railroad officials reversed their attitude, and quickly established intimate relations with the government officials engaged in drafting the necessary legislative measures. The wisdom of this procedure was self-evident and it bore fruit in abundance, as we shall see.

ESSENTIALS OF THE PLAN NOW PENDING IN CONGRESS

Shortly after the reconvening of Congress in December, 1917, a bill was introduced in both Houses establishing the plan of government control. This measure contemplates the government operation of the principal railroad systems in the country under the immediate direction of one man. To fill this responsible post the President has selected the Honorable William G. McAdoo as Director General. Under the provisions of this bill the President is authorized to guarantee:

1. Regardless of how high the cost of labor and supplies may go during the war, the average net railway operating income for the three years ended, June 30, 1917, plus additional compensation for

all improvements built since that date out of new money, government loans, or earnings from operation.

2. To adequately maintain the properties.
3. To maintain railway credit by loaning all necessary funds for improvements and betterments.
4. To return the properties at the end of the period in as good condition as when taken.

If satisfactory agreements cannot be effected with any carriers the President has the option of increasing the compensation providing exceptional reasons exist, or the matter may be referred to a board of referees, and upon failure to agree the whole matter is subject to trial in the court of claims. Allowing for the inevitable increases for companies not accepting the proposed compensation, the total sum guaranteed will probably exceed one thousand million dollars annually. (The Senate Committee on Interstate Commerce estimates this at \$955,000,000 to \$960,000,000, if all roads should accept the original guarantee; but there are many short lines, whose earnings have been squeezed down by the large companies in the divisions of through rates. The large companies under the provisions of the bill will continue to get these excessive earnings, and the small roads will go into court, as provided in the bill, in order to secure additional compensation. A railroad system like the Pennsylvania will increase its standard return above the average of the three-year period in the following manner: the parent company will accept the guaranty provided in the bill and the subsidiary will go into court—and *that subsidiary may be owned completely by the parent company*. The settlement should be by "system." The original bill so provided it; but a clever change was made specifying a "railroad" or a system.)

The total bonded indebtedness of American railways, as of June 30, 1917, was \$10,021,730,075; and the capital stock outstanding in the hands of the public was \$6,314,570,354. After the payment of all interest the railroads as a whole, under the proposed guaranty will earn, net, approximately $8\frac{1}{2}$ per cent on all their capital stock outstanding; this includes the rich and the poor, water and all. Think of substituting for the six billion dollars of railroad stocks in this country, six billion dollars worth of $8\frac{1}{2}$ per cent government bonds. It is true the companies cannot increase their dividends during the period of federal control without the consent

of the President; but there is nothing to prevent the distribution of the accumulated surplus after the war is over. In the case of a bond the government takes your money and at the end of the period returns your money, paying interest in the interim. Likewise, under the plan of federal control, the government takes the property of the railway company guaranteeing to return the property at the end of the period, in as good a condition as when taken, and also guarantees an annual return. Here we have all the essentials of a government bond—the payment of the principal and interest.

We are shielding the railroads from the effects of the war; we are protecting them from all advances in the cost of materials and in the cost of labor; we are guaranteeing the railroads their net income earned during the most prosperous three-year period since the steam engine was invented—regardless of what may happen to their expenses.

During the years 1916 and 1917 American industry—including our railroads—received the profits from the very large demands occasioned by the European war, without being compelled to suffer the attendant losses that must inevitably follow our own active participation in the struggle. The result was that American industry in practically all lines reaped tremendous profits. That exceptional condition ceased when we entered the war. The earnings during such a period do not constitute a just criterion of normal earnings before or after that period.

Consider a few of the circumstances which make this true. When the war was thoroughly in progress large demands for clothing, food, and war munitions came from the European countries—demands far in excess of what they required in former years, because a large per cent of their population was not engaged in productive pursuits, and because of the enormous consumption of munitions which did not exist in former years. On the other hand, our industrial population was not depleted, and the ordinary traffic among our own people still continued. The excess demand from Europe was a net gain of vast proportions. All American business felt this tremendous stimulus.

In 1916 the net earnings of American railroads as a whole suddenly increased to an amount that was two hundred million dollars greater than ever before in their history. In 1916 the net income of the eastern railroads above all their expenses, taxes, and

interest on debt, exceeded any other year by more than sixty millions, an increase of over 27 per cent. These increases were very remarkable. Nothing like this had ever occurred before in the history of our country. The earnings of some companies had shown phenomenal increases at times, while others might remain stationary or decline; but an increase of this character in the whole industry was phenomenal. The fiscal year 1917 showed net earnings surpassing any other year, with the single exception of 1916. This condition in the railroad industry was simply analogous to what occurred generally throughout the nation.

But what will follow our own participation in the conflict—when we are on the same war footing as our allies?

First—one to five million active, strong men in the prime of their youth are to be taken from our farms and factories. The effect on the cost of labor and supplies is self-evident.

Second—it will be impossible for many industries to continue because ultimately we will have to concentrate our work, as never before, on the real necessities of life, in order to produce them in sufficient volume to meet the increased demands, with a decreased industrial population. The same thing has occurred in the leading European countries engaged in the war.

Third—capital will be extremely difficult to secure, and will command exorbitant rates. The war needs of the government will demoralize the money markets. Some conception of this may be gained when a person realizes just how much money the government will require to carry on this task of waging a war on another continent. The chief creditors of a government are, ordinarily, its own citizens. When their funds are drained, interest rates go skyward. A short time ago Anglo-French 5's, which have behind them the combined credit of England and France, were selling on a 9.3 per cent basis. City of Paris 6's have been selling on a 12.5 per cent basis. British consols—long considered the premier security of the world—have been selling at a yield ranging from 5 to 6 per cent. The 5½ per cent bonds of Great Britain which have but little risk connected with them, coming due next year, were selling during the closing weeks of 1917 on an 8.6 per cent basis. These government bonds in the past have been sold on a basis ranging from 2 to 4 per cent. When United States government bonds are sold on a 6 or 8 per cent basis, you will find industrials selling on a 10 or 12 per

cent basis, and the market values of industrial securities will decline accordingly.

During 1917 there was a slight recovery in money rates in Great Britain, due, undoubtedly, to our entrance into the war, and our furnishing much needed capital for some purposes. After the first effect of that has passed, and money for investment purposes in the United States becomes scarce, it is inevitable that the declines in security values will begin again on both continents. The extreme western portion of the United States has felt the pressure less than any other part of our country. Today money is being loaned for extended periods to private companies in California on a lower basis than the securities of the British government are being sold on the London market.

During the next few years it is certain that many individuals and companies will be unable to secure labor or materials except at enormous prices, and new capital will command very high rates. Coupled with this increased cost of operation the market for many products will be partially or wholly destroyed.

We, as a people, have not realized that which is inevitable if this war continues. The sooner we come to a realization of the true situation, the better it will be for all of us, and the more intelligently will we deal with the great problems pressing upon us for decision.

A document recently published for the purpose of encouraging investment in liberty bonds states that our government will require approximately twenty billion dollars annually for war purposes. The total income of the country has been estimated at about forty billion dollars. In other words, continues this publication, every citizen will be expected to contribute, on an average, one half of his entire income to the prosecution of the war, either in the payment of taxes or the purchase of bonds. Contemplate, for a moment, the effect of that on the many manufacturing concerns which are not directly connected with the war. Vast sums will be concentrated in this one line, which formerly went out into all the varied industrial activities of a great nation. Many industries will be demoralized, some will be destroyed, and thousands of business men will be forced to the wall.

THE PROGRAM OF THE RAILWAY FINANCES

With a full appreciation of just what is in store for the average man let us now consider what the keen, able, far-sighted railroad financiers are trying at this moment to force through Congress, in the name of "patriotism," with just as little debate as possible, in advance of the treacherous times that are to come, and before the great body of our citizens, or their representatives, have paused to look forward into the future, before they have awakened to the real situation which confronts us as a nation. We do not claim that railroad officials have no patriotism. There is no class of men in America that are more patriotic. We simply denounce this constant attempt to increase the net revenues of railway companies under the subterfuge of patriotism. This is patriotic camouflage, nothing more nor less.

Some comprehension of just what the proposed guaranty means can best be obtained by considering a few concrete examples.

J. S. Bache and Company, of New York, have made an analysis of the proposed guaranty for a number of railroad systems. According to their computations, the New York Central will receive 12.4 per cent on its common stock.

During the past six years the stock of the New York Central has never commanded on the market a price as high as 120, and yet we propose to give the equivalent of a government bond, bearing a rate of over 12 per cent while the war lasts, to the New York Central stockholders.

The Bache Company estimates the return on the Pennsylvania stock to be 8.54 per cent; the Chicago and Northwestern 9.27 per cent; the Delaware, Lackawanna and Western 37.31 per cent; and the Reading 17.71 per cent.

The following table, compiled by the statistical department of the Interstate Commerce Commission, shows all of the companies in the United States earning 5 per cent or more on their capital stock. This table states what the various companies will earn on their stock under the three-year guaranty. (This appears in print for the first time in the Minority report of Senator Cummins.)

Road (a)	Capital stock actually outstand- ing. Average for the three years ended June 30, 1917 (B) (c)	Average net income for the three years ended June 30, 1917 (C) (d)	Average per cent of net in- come to capital stock (d)÷(c) (e)
EASTERN DISTRICT			
Pennsylvania R. R. Co.....	\$499,195,567	\$44,534,939	8.92
New York Central R. R. Co.....	249,676,128	32,367,269	12.96
Balto. & Ohio R. R. Co.....	210,809,812	12,285,229	5.83
Pennsylvania Co.....	80,000,000	9,537,859	11.92
Phila. & Reading Ry. Co.....	42,481,700	10,916,875	25.70
Del., Lack. & Wn. R. R. Co.....	42,220,400	13,890,560	32.90
Pgh., Cin. Chgo. & St. L. R. R. Co.....	67,511,723	4,558,593	6.75
Lehigh Valley R. R. Co.....	60,608,000	7,169,999	11.83
Clev. Cin. Chic. & St. L. Ry. Co.....	57,027,200	5,048,902	8.85
Michigan Central R. R. Co.....	18,736,400	2,463,464	13.18
Central R. R. Co. of N. J.....	27,436,800	5,556,775	20.25
Delaware & Hudson Co.....	42,502,600	5,437,547	12.79
Phila. Balto. & Wash. R. R. Co.....	25,571,000	2,941,156	11.50
Pitts. & Lake Erie R. R. Co.....	31,991,200	7,537,923	23.56
Elgin, Joliet & En. Ry. Co.....	10,000,000	945,239	9.45
Maine Central Ry. Co.....	18,199,317	1,605,075	8.82
Buff. Roch. & Pgn. Ry. Co.....	16,500,000	1,560,021	9.45
Bessemer & Lake Erie R. R. Co.....	500,000	3,236,080	647.22
Chicago & Erie R. R. Co.....	100,000	70,449	70.45
Hocking Valley R. Co.....	10,999,500	1,313,129	11.94
West J. & Seashore R. R. Co.....	10,317,983	691,139	6.70
Central New E. Ry. Co.....	8,547,200	717,566	8.40
N. Y. Phila. & Nor. R. R. Co.....	2,500,000	893,508	35.74
Rutland R. R. Co.....	9,150,300	575,651	6.29
Bangor & Aroostook R. R. Co.....	4,079,067	337,808	8.28
Cumberland Val. R. R. Co.....	5,333,550	1,280,684	24.01
Kanawha & Michigan Ry. Co.....	9,000,000	991,665	11.02
Lehigh & N. E. R. R. Co.....	6,000,000	819,722	13.66
Chgo. Terre H. & S. En. Ry. Co.....	4,300,000	234,761	5.46
Lehigh & Hudson River Ry. Co.....	1,340,000	374,915	27.98
Monongahela Ry. Co.....	3,809,333	352,809	9.26
Cincinnati Nn. R. R. Co.....	3,000,000	268,573	8.95
Port Reading R. R. Co.....	2,000,000	182,547	9.13
Det. & Toledo S. L. R. R. Co.....	1,428,000	348,020	24.37
Buf. & Sus. R. R. Corp.....	7,000,000	496,203	7.09
Staten Is. R. T. Co.....	500,000	160,119	32.02
Detroit & Mack. Ry. Co.....	2,950,000	218,976	7.42
Total.....	\$1,593,322,780	\$182,921,748	11.48

Road (a)	Capital stock actually outstand- ing. Average for the three years ended June 30, 1917 (B) (c)	Average net income for the three years ended June 30, 1917 (C) (d)	Average per cent of net income to capital stock (d) + (e)
SOUTHERN DISTRICT			
Illinois Central R. R. Co.....	\$109,288,114	\$12,383,882	11.33
Louisville & Nashville R. R. Co.....	72,000,000	12,056,800	16.75
Norfolk & Western Ry. Co.....	138,580,867	17,342,810	12.51
Chesapeake & Ohio Lines.....	62,786,000	5,848,431	9.31
Atlantic Coast Line R. R. Co.....	68,754,700	7,424,004	10.80
Central of Georgia Ry. Co.....	20,000,000	1,878,570	9.39
Nashville, Chattanooga & St. Louis Ry.	15,994,831	2,175,426	13.60
Mobile & Ohio R. R. Co.....	6,016,800	888,067	14.76
Cincinnati, New Orleans & Texas Pacific Ry. Co.....	5,443,400	2,448,928	44.99
Florida East Coast Ry. Co.....	10,833,333	1,090,321	10.06
Alabama Great Southern Ry. Co.....	11,210,350	1,364,246	12.17
New Orleans & North Eastern R. R. Co....	6,000,000	646,449	10.77
Richmond, Fredericksburg & Potomac R. R. Co.....	4,315,067	979,486	22.70
Georgia Southern & Florida Ry. Co.....	3,768,000	222,186	5.90
Charleston & Western Carolina Ry. Co.	1,200,000	230,036	21.67
Gulf & Ship Inland R. R. Co.....	7,000,000	373,070	5.33
Alabama & Vicksburg R. R. Co.....	2,100,000	360,784	17.18
Washington & Southern Ry. Co.....	4,000,000	348,641	8.72
Atlanta & West Point R. R. Co.....	2,463,600	292,922	11.89
Western Railway of Alabama.....	3,000,000	251,851	8.39
Total.....	\$554,745,062	\$68,636,910	12.37

Road (a)	Capital stock actually outstand- ing. Average for the three years ended June 30, 1917 (B) (c)	Average net income for the three years ended June 30, 1917 (C) (d)	Average per cent of net income to capital stock (d) ÷ (c) (e)
WESTERN DISTRICT			
Atochison, Topeka & Santa Fe Ry. Co.....	\$332,223,877	\$32,230,021	9.70
Southern Pacific Co.....	276,725,239	17,933,726	6.60
Chicago, Milwaukee & St. Paul Ry. Co.	233,835,167	14,336,613	6.15
Chicago, Burlington & Quincy R. R. Co..... (G)	110,839,100	24,444,045 (G)	22.05 (G)
Chicago & Northwestern Ry. Co.....	157,591,852	16,040,515	10.18
Great Northern Ry. Co.....	249,361,866	24,021,887	9.63
Northern Pacific Ry. Co.....	347,283,000	24,287,781	9.87
Union Pacific R. R. Co.....	321,836,100	31,018,338	9.34
Minneapolis, St. Paul & Ste Marie Ry..... (G)	37,810,200	4,571,790 (G)	12.09 (G)
Oregon Short Line R. R. Co.....	100,000,000	9,381,016	9.38
Texas & Pacific Ry. Co. (Rec.).....	32,755,110	2,548,330	6.58
Chicago, St. Paul, Minneapolis & Omaha Ry. Co.....	29,815,000	3,854,452	9.57
Duluth, Missabe & Northern Ry. Co.	4,112,500	4,693,088	114.12
El Paso Southwestern Co..... (G)	25,000,000	2,190,198 (G)	8.78 (G)
Houston & Texas Central R. R. Co.....	10,000,000	1,089,368	10.88
Duluth & Iron Range R. R. Co.....	5,333,333	3,040,987	38.27
Fort Worth & Denver City Ry. Co.....	9,243,800	1,297,029	14.03
Panhandle & Santa Fe Ry. Co.....	804,500	389,097	64.37
St. Louis, Brownsville & Mexico Ry. Co....	500,000	263,544	52.71
Chicago, Rock Island & Gulf Ry. Co. (G)	469,000	83,685 (G)	17.84 (G)
Bingham & Garfield Ry. Co.....	6,171,687	1,405,681	22.78
Louisiana Western Ry. Co.....	3,360,000	802,684	23.89
Nevada Northern Ry. Co.....	2,000,000	879,907	43.99
Vicksburg, Shreveport & Pacific Ry. Co....	4,999,300	299,634	5.99
Houston East & West Texas Ry. Co.....	1,920,000	234,199	12.20
Cripple Creek & Colorado Springs Ry. Co. ...	757,000	171,619	22.67
Colorado & Wyoming Ry. Co.....	100,000	162,636	162.64
Wichita Valley Ry. Co.....	1,020,000	117,936	11.56
Arizona & New Mexico Ry. Co.....	3,770,000	337,314	8.58
Total	\$2,210,635,811	\$220,076,073	9.96

An important objection has been made to statements concerning the guaranteed net income on capital stock. Net income under the Commission's system of accounting includes not only earnings from operation but income from outside investments. The government does not guarantee these outside revenues. Another objection which can be made to the computations quoted above is that they fail to show system figures. A parent company may have several subsidiaries that do not earn much on their outstanding capital stock.

In order to meet both of these objections and to ascertain the real effect that such modifications would have on the results, we have compiled the statistics for the railroad systems handling 72 per cent of the traffic in the eastern district. In column A we show the average dividend rate on the system; in column D the average return, including income from outside sources as well as revenues from operation during the past three years; in column F we have eliminated all income from outside operations. These railroad systems under the government guaranty will be able to pay all of their operating expenses, taxes, interest on funded and unfunded debt, rentals, leases, etc., and have enough left out of earnings from operation alone, to equal an average of 10 per cent on all their capital stock outstanding in the hands of the public. In addition to this government bond for 10 per cent during the war, these companies will have large revenues from outside sources. During the past three years, this outside income has averaged over \$30,000,000 a year. This table has been compiled from the exhibit prepared by the eastern railroads in the Fifteen Per Cent Case before the Interstate Commerce Commission. (See table on p. 96.)

In contrast with the foregoing statements showing the situation on American railroads, under the proposed government guaranty, we present a somewhat similar table (p. 97) showing the government guarantees on the roads handling 86.60 per cent of the traffic in Great Britain. These earnings should be further reduced by reason of the modification caused by the increased wages, a portion of which the railroad companies have assumed.

Summarizing the situation, it may be stated that the railroad bill now pending before Congress proposes the following guarantees made on behalf of the government of the United States: (1) to return the properties at the end of the period of government control in as good condition as that at the time they were taken over; (2) to loan the railroads all the money necessary for betterments and improvements, probably at the rate on government bonds; (3) to shield the large prosperous railroad systems from all future increases in the cost of labor and supplies while the war lasts; (4) to protect these larger railroads from all financial hazards of the war which will threaten the very life of many industries, and possibly wreck many railroads that will not be granted a government guaranty; (5) and to guarantee the larger railroads, annually,

STATEMENT OF THE NET INCOME AND CAPITAL STOCK, EASTERN RAILROADS, YEAR ENDING JUNE 30, 1917

Name of road	1917 dividend rate (system avg.), (%)	Capital stock outstanding in 1917	Average net income three years 1915-1917	Average return on 1917 capital stock (%)	Average net income less other income 1915-1916-1917	Average guaranteed return (%)
Bessemer & Lake Erie R. R.....	A 11.36	B \$12,498,850	C \$3,515,494	D 28.12	E \$3,453,031	F 27.03
Central R. R. of New Jersey.....	11.68	28,716,800	5,597,551	19.49	4,634,079	16.14
Delaware & Hudson Co.....	8.82	56,855,500	6,469,916	11.38	4,428,769	7.79
Delaware, Lackawanna & Western R. R....	12.83	87,048,638	16,545,849	19.01	11,824,622	13.58
Lehigh Valley R. R.....	9.76	62,110,998	7,026,317	11.31	3,846,914	6.19
New York Central System.....	5.50	369,230,457	49,426,960	13.39	39,371,056	10.06
Norfolk & Western Ry.....	7.16	143,397,200	17,341,467	12.09	16,520,923	11.52
Pennsylvania R. R. System.....	6.48	620,538,136	66,418,510	10.70	54,379,661	8.76
Reading System.....	7.10	98,558,337	11,466,252	11.63	11,240,132	11.40
Chesapeake & Ohio Ry.....	4.00	62,786,000	5,844,756	9.31	4,859,525	7.74
Buffalo Rochester & Pittsburgh R. R....	6.00	16,500,000	1,590,021	9.45	1,478,723	8.96
Lehigh & New England R. R.....	8.00	6,000,000	819,477	13.66	784,957	13.08
Hocking Valley Ry.....	4.00	10,999,500	1,313,128	11.94	1,279,985	11.64
Lehigh & Hudson River Ry.....	12.00	1,340,000	374,413	27.94	369,252	27.56
Total.....	6.94	\$1,576,630,466	\$193,719,211	12.29	\$158,472,228	10.06

Notes: The foregoing table has been compiled from the exhibits offered by the railway companies in the Fifteen Per Cent Case, last November,—the case being tried before the Interstate Commerce Commission.

We show the rate of return which was earned by fourteen of the principal railroad systems in the Eastern District. These roads handled 73 per cent of the traffic in said District last year. Net income includes income from operation as well as that which is received from outside investments, known as "other income." First, we show the ratio this factor, known as net income, bears to the capital stock outstanding. Second, we have subtracted from the net income, all income from outside sources. This leaves only the earnings derived from operation of the railroad property after all interest charges are paid. We then show the rate that this net income from operation bears to the capital stock.

¹ This percentage differs slightly from that given before the Congressional Committees recently, as the percentage here is based on the 1917 capital stock (being brought down to the latest year) instead of on the average capital stock for the three years.

RAILWAYS IN UNITED KINGDOM WHOSE GROSS RECEIPTS FOR YEAR 1913 EXCEEDED £1,000,000

Name of road	Gross receipts	Ordinary stock	Preferential stock	Guaranteed stock	Total stock (a)	Dividends on ordinary stock	Dividends on preferential and guaranteed stock	Total dividends	Rate of dividend (%)	Net income	Fixed charges	Net income less fixed charges	Rate of return (%) (b)
Great Central.....	£ 5,929,558	£ 10,558,020	£ 17,185,428	£ 3,382,081	£ 31,225,509	£ 354,072	£ 866,076	£ 1,220,300	2.77	£ 2,218,221	£ 1,352,885	£ 865,336	2.77
Great Eastern.....	6,015,112	15,959,586	14,731,708	6,094,627	36,189,221	738,538	825,228	1,563,766	3.34	2,173,320	980,355	1,222,945	3.38
Great Northern.....	9,742,119	22,454,256	19,759,520	3,485,740	45,649,510	758,838	910,910	1,669,748	3.72	2,463,016	700,189	1,762,827	3.86
Great Western.....	13,431,112	36,693,419	11,036,348	25,555,191	74,186,749	2,284,451	1,874,577	4,159,028	5.61	5,929,034	1,574,657	4,354,377	5.87
London and North Western.....	15,326,659	49,890,095	29,104,816	2,596,012	50,529,298	846,966	1,919,267	2,766,233	3.69	6,602,111	1,713,811	4,888,300	3.74
London and North Eastern.....	12,147,019	22,189,814	18,700,226	10,797,980	41,888,020	831,199	1,735,526	2,566,725	5.50	6,324,585	1,512,792	4,821,803	5.62
London, Brighton & South Coast.....	3,584,118	10,447,085	10,121,672	1,965,860	22,524,617	548,472	603,876	1,152,348	5.12	1,930,911	378,445	1,552,466	5.13
Midland.....	13,254,130	78,193,397	63,988,974	18,089,560	150,273,931	2,636,194	2,069,951	4,706,145	2.94	6,362,788	1,434,787	4,927,951	3.07
North Eastern.....	11,318,136	39,039,605	16,273,797	8,503,295	56,813,697	2,242,142	991,046	3,233,188	5.69	4,454,968	914,869	3,540,099	6.23
North Staffordshire.....	1,068,978	5,594,650	3,317,453	1,170,000	8,082,133	179,732	155,024	337,756	4.18	1,441,288	95,071	346,217	4.28
Southeastern and Chatham Railway Companies' Managing Committee: London, Chatham and Dover.....	4,890,589	11,255,282	7,878,532	122,313	19,260,427	401,969	533,940	935,909	1.72	816,193	483,253	332,940	1.73
South Eastern.....	.....	10,049,220	12,286,385	1,784,300	24,119,915	.....	.....	.....	3.88	1,415,960	483,537	933,423	3.87
Total England and Wales.....	98,381,981	314,653,994	253,158,820	88,587,345	656,400,159	14,166,341	12,641,490	26,807,831	4.08	38,937,867	11,189,702	27,748,165	4.23
Caledonian.....	5,190,155	35,569,256	14,526,437	9,268,154	59,363,847	646,311	968,183	1,614,494	2.72	2,334,041	707,851	1,626,190	2.74
Glasgow and South Western.....	2,012,727	12,654,790	5,491,091	2,260,450	20,406,331	314,052	301,962	616,014	3.02	825,568	229,969	595,599	2.92
North British.....	5,254,607	21,579,157	27,575,987	49,155,144	99,155,144	347,361	1,075,830	1,516,191	3.08	427,282	87,725	1,509,557	3.19
Great Northern of Ireland.....	1,191,266	4,049,989	1,749,093	869,270	6,668,264	242,997	184,196	427,193	5.21	457,631	105,788	351,843	5.23
Great Southern and Western.....	1,530,766	5,479,800	1,696,765	2,896,184	10,072,749	286,276	184,196	450,472	4.47	716,018	215,362	500,656	4.96
Total United Kingdom.....	113,600,532	393,986,986	304,198,105	102,881,403	802,066,494	16,073,338	15,279,391	31,352,729	3.91	45,698,407	13,306,397	32,392,010	4.04
Per cent of gross receipts of all railways in United Kingdom.....	86.60	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

* Includes interest on loans, debenture stock and miscellaneous fixed charges.

* Gross receipts of all railways are as follows: England and Wales, £109,903,544; Scotland, £13,642,742; Ireland, £4,623,167; Total, £128,174,163.

* Authority, Railway Returns of the United Kingdom for the Year, 1913.

sums that will be sufficient to pay all their operating expenses, taxes, interest, dividends and surplus equal to that which they have earned during the years 1915 to 1917 inclusive, the most prosperous three-year period in their entire history.

It is also proposed, as stated by the author of the major portion of the bill, that the shippers, who will have their own burdens to carry during this perilous time, will be expected to make up any deficit of the government in the guaranty made to the railroads.

We can snuff out the life of our boys in the trenches. We can wreck many industries. We can blast the business of the short line, the poor road. But when it comes to these rich, powerful corporations, the big companies, the great railroads, we heroically announce that we are going to protect them from the effects of the war. And we do all this in the name of patriotism.

To the Burlington Railroad we say, "You now have a stock paying a regular dividend of 8 per cent. While the war lasts please accept this 22 per cent government bond in lieu of that railroad stock. We not only guarantee you this 22 per cent annually on your stock; but we guarantee to return the principal in full in this manner—after the war is over we solemnly guarantee to give back your property in just as good a condition as we take it." This has all the essential elements of a 22 per cent government bond. While the war lasts the government guarantees the annual payment on the stock, and at the end of the war the government guarantees to return the property in full. Here you have the payment of the principal and the interest. Not only do we guarantee to the Burlington annually that 22 per cent on its capital stock, but we also guarantee, with all the wealth and resources of the United States government back of the pledge, that we shall pay all interest charges on all its funded and unfunded debt, maintain its properties adequately and efficiently, and present to the Burlington Railroad an absolute government credit, enabling the company to borrow all the money it may need. We tell the Burlington Railroad to go ahead, rehabilitate and improve its property out of the public treasury, while many other industries are being prostrated; and then don't forget to take that little check annually for 22 per cent. We do all this in the name of patriotism.

It has been suggested that the payment of these large earnings to the railroads is necessary to facilitate the sale of government

bonds. How will it help the sale of 4 or $4\frac{1}{2}$ per cent government bonds to give a government guaranty to railroad stocks amounting to 10 per cent annually? It is axiomatic that the higher you make the prevailing rate on other securities, the more difficult will it be to sell government bonds at a lower rate. Where is there any reason for thinking a guaranty of 10 per cent instead of 6 or 7 per cent on railroad stocks will facilitate the sale of government bonds? Why should the stockholder part with the 10 per cent security in order to purchase a $4\frac{1}{2}$ per cent government bond? The higher you make the earnings on railroad securities, the more difficult will it be to persuade the railroad stockholder to part with his security. The logic involved in advocating a 10 per cent or 20 per cent return on railroad stock in order to help the sale of 4 or 5 per cent government bonds is a charming exhibition of the usual statesmanlike stupidity which governs our public activities.

Our first task is to win the great war, but that cannot be used to throw dust in our eyes on matters of justice as between the citizens of this country. There are some offenses that cannot be committed with impunity, even though they be done in the name of patriotism. We are patriots first, last, and all the time; but we are not fools. There is such a thing as camouflage in the demagogic panegyrics of the politician who does everything, big and little, right or wrong, in the name of patriotism.

TERMINATION OF GOVERNMENT CONTROL

The measure originally presented provided no definite time for the termination of the government operation of our railroads. The Senate Committee amended this, limiting the time to eighteen months after the termination of the war. The House Committee has amended the bill, limiting the time of operation to a period of two years after the war. The possible effect of no limit on the period of government operation has precipitated vigorous discussion from both the friends and opponents of government ownership. Various and conflicting claims have been made. Whatever policy is subsequently adopted, it is quite essential that a substantial period shall elapse during which necessary legislation can be enacted to meet the situation then existing and providing for the necessary accounting. There is no doubt but what Congress will limit the period of government operation. As the time limit approaches, the

entire subject of government ownership versus private ownership will be forced into prominence.

JURISDICTION OF THE INTERSTATE COMMERCE COMMISSION

Practically everyone recognizes the necessity for concentrating the operation of American railroads in the hands of the President during the emergency now confronting the nation. Another question, however, has arisen. This relates to the jurisdiction of the Interstate Commerce Commission over rates and charges of the railway companies. At the present writing, the committees in the two houses of Congress are divided on this proposition; the Senate Committee recommended a bill giving power of initiating rates into the hands of the President, and leaving the jurisdiction with the Commission to finally determine the reasonableness of any and all changes under the Act to Regulate Commerce and the amendments thereto. The House Committee has declined to accept this amendment to the bill as originally proposed. This is but a passing phase of a contest that has been carried on for many years to cripple, and if possible, to destroy the Commission. The shipper like the railroad will suffer from the inconveniences and hardships occasioned by government operation interfering with the ordinary movements of traffic, and giving priority to those commodities most essential to the efficient prosecution of the war. It can safely be said that both the railroad and the shipper have patriotically consented to this interference, without objection.

However, on matters of compensation a different situation exists. There is no necessary connection between the efficient operation of the railroad and the determination of the proper compensation to be paid by the government to the railway company. There may be some relation between the two, but it is incidental, and not of substantial importance. The railway company has a right to a full hearing before a disinterested tribunal if an agreement cannot be effected between the government and the company, and no one has even suggested that this right should be interfered with by the so-called "war power." The shipper claims that his rights to a full hearing relative to the compensation to be paid by the shipper are just as sacred as are those involving the compensation to be paid to the railroad. The justice of the demand on behalf of the shipper to a full hearing has been forcibly stated by the Supreme Court in

Interstate Commerce Commission v. Louisville, etc. (227 U. S. 88), wherein the following language appears:

But such a construction would nullify the right to a hearing,—for manifestly there is no hearing when the party does not know what evidence is offered or considered and is not given an opportunity to test, explain, or refute. The information gathered under the provisions of section 12 may be used as basis for instituting prosecutions for violations of the law, and for many other purposes, but is not available, as such, in cases where the party is entitled to a hearing. The Commission is an administrative body and, even where it acts in a quasi-judicial capacity, is not limited by the strict rules, as to the admissibility of evidence, which prevail in suits between private parts. *Interstate Commerce Commission v. Baird*, 194 U. S. 25. But the more liberal the practice in admitting testimony, the more imperative the obligation to preserve the essential rules of evidence by which rights are asserted or defended. In such cases the Commissioners cannot act upon their own information as could jurors in primitive days. All parties must be fully apprised of the evidence submitted or to be considered, and must be given opportunity to cross-examine witnesses, to inspect documents and to offer evidence in explanation or rebuttal. In no other way can a party maintain its rights or make its defense. In no other way can it test the sufficiency of the facts to support the finding. *Interstate Commerce Commission v. Louisville & Nashville Railroad*, 227 U. S. 88, 93.

We have had the Interstate Commerce Commission for thirty years. During this period our railroads have prospered. The best evidence of this fact is that the companies handling the bulk of the traffic in the nation have been able to pay liberal dividends, and the net revenues of the American railroads as a whole during the past three years have exceeded the net revenues of any other like period. This fact has been conclusively established beyond controversy. During the next few years the Commission will be of greater importance to the shipper than during any other like period in our history.

ADVANCED FREIGHT RATES

There are some who are advocating a general advance in freight rates in the United States, should it become necessary to make up any deficit in the amount guaranteed to American railroads under the provisions of the bill now pending. Before the government should adopt such a policy there are some facts worthy of serious consideration. At the outset it must be remembered that such a course of action would be diametrically opposed to that which has been adopted in Great Britain.

The expedited special service required by the government in the movement of troops, munitions and other war supplies will serve to discommode other traffic, creating embargoes, confusion, extended delays, forcing other trains, both passenger and freight, to give way to the movement of trains carrying war supplies. No one is objecting to these inevitable hardships, but attention is called to the fact that the government is thereby securing expedited special services for ordinary rates. It would be very difficult to estimate the actual cost of this kind of service and the attendant confusion occasioned to other traffic. This extra service is in all respects a governmental activity and the burden should be borne by the government,—by the public generally—not by the shipper. If every shipper were able to pass on the cost to the consumer it might not work any hardship to advance the freight rates to take care of these extra costs; but in actual practice we find that some jobbers and some manufacturers in certain lines of industry in the cities, are able to pass on the burden to the consumer; but, on the other hand, many jobbers, manufacturers and producers have to absorb the larger portion of any advance in freight rates that is made. This is true of the oil industry because the chief competitor of the independent is enabled to ship his product largely through pipe lines. The price on grain is generally the price at the market less the transportation charge from point of origin. The same is true of the livestock traffic. Even where the shipper is able to pass on the burden to the consumer there are certain objections. A tax (and this has all the essential elements of a tax) pro-rated in that manner compels the man who buys the necessities of life to bear the heavy part of the load and it is not apportioned in accordance with the ability to pay the tax. Many times the manufacturer or jobber uses such an increase as an excuse for levying an additional charge upon the public for the common necessities of life amounting to several times the actual increased cost.

We should keep clearly in mind the distinction between the ratepayer and the taxpayer. The shipper is perfectly willing and is glad to bear his fair share of the burden of the cost of this war. He could rightfully object, however, to any program which forces him to bear his share and, in addition thereto, to carry other people's burdens. These extraordinary costs of operation occasioned by confusion, congestion, etc., are caused by the government; they

are a part of the war program. This extra cost should be borne by the taxpayer and not by the ratepayer. Of course the shipper will then bear his fair share of the burden.

The shipper will have to bear his own increases in the cost of labor and supplies along with the rest of the people. It would seem unfair to compel him also to bear the increased cost of labor and supplies of the railroad companies occasioned by the war. The reason we say to the railroads that we will protect them from these increased expenses is because we consider our transportation system an essential governmental agency at this crucial time. We do it as a matter of public policy. It is a burden assumed by the government and the citizens as a whole should share in that burden, instead of forcing it upon a relatively small group of shippers scattered throughout the country. As previously stated what we suggest is precisely the policy that has been adopted in Great Britain. It is sound economically, morally, and legally.

GOVERNMENT OPERATION IN GREAT BRITAIN

The essentials of the British plan for the operation of railroads during the war may be briefly described as follows:

1. A committee of thirteen, including the president of the Board of Trade and the general managers of the leading British railroads are in active control of the railways in England, Wales and Scotland, under authority of the Act of 1871.

2. The government undertakes to maintain the properties on a standard similar to that existing prior to the war, except that a certain percentage, said to be 12½ per cent, is added to the maintenance allowances of the pre-war period, because of the extra cost and wear and tear occasioned by high prices and the extraordinary use now demanded of the railroads.

3. The government guarantees the net income for the year 1913 less an amount equal to one-fourth of the first wage bonus granted to labor, the total reduction amounting to approximately £1,000,000. (The original reduction was equal to the amount by which their net revenues during the first seven months of 1914 fell below the corresponding period of 1913. This condition or proviso was stricken out and the reduction named above was substituted therefor.)

4. No payment is made for the movement of government troops or munitions, it being presumed that the payment of the

difference between the guaranty and the receipts from other traffic is sufficient compensation for this service.

5. Very large and substantial increases in wages have been paid to labor. The first advance was divided as follows: the government assumed three-fourths of the amount and the railway companies assumed the other one-fourth by reducing their guaranteed return to that extent, as described above. All subsequent advances in wages have been assumed by the government. There has been no general advance in freight rates during the war. In 1913 there was an increase of approximately 4 per cent, which it is said became operative at a somewhat later date. This was about the time the 5 per cent was granted by the Interstate Commerce Commission on 50 per cent of the traffic in the eastern district.

There are certain essential differences in the method adopted in Great Britain and that contemplated in the United States in connection with the taking over of the railroads.

In Great Britain the dividends average much less than the dividends on railway stocks in this country. In Great Britain the average surplus (as well as the *typical* surplus) is approximately one-half of 1 per cent. In the United States the average surplus above dividends for the year ending June 30, 1917, was approximately 4 per cent. In other words, the surplus in the United States is approximately eight times as great as the surplus in Great Britain. The guaranty of the net income for 1913 in Great Britain with the subsequent modification that was adopted was not even sufficient to insure the payment of dividends on the principal railroads of the country. We here present an extract from a statement compiled by the Legislative Reference Department of the Congressional Library, the document being prepared by Mr. Gilbert Hirsch.

Before the terms were made public, a report had got out that the basis of compensation was to be a government guarantee of the existing dividend. The *Investors' Review* had it that the dividend average for the three preceding years was to be the basis of this guarantee.²

Even after the terms became known, it was popularly assumed that they involved a guarantee that the government would give the railway shareholders every existing dividend.³ The *Railway News* stated, shortly after the announce-

² September 19, 1914, p. 319.

³ Mr. Healy in the House of Commons, May 3, 1917, 93 H. C. Deb., pp. 564-565.

ment⁴ that shareholders would get dividends at rates approximately equal to those of 1913. And the Economist declared, over a year later⁵ that dividends are more or less guaranteed under the arrangement with the government. There has, however, been some falling off in the dividend rate during the war.⁶

The following statistics have been prepared by James H. Oliphant & Co., of New York, and show the situation on nine of the leading railroads in Great Britain.

WAR-TIME DIVIDENDS OF BRITISH RAILWAYS

[There follows a selected list of the common or ordinary stocks of several of the most important British railways, together with their dividend records, 1913 to 1916, inclusive.]

	1913	1914	1915	1916
	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
Caledonian.....	3½	3½	3½	3½
Great Eastern.....	2½	2½	2½	2½
Great Western.....	6½	6	5½	5½
Great Northern.....	3	2½	2½	2½
London & North Western.....	7	6	6	5
London & South Western.....	5½	5½	5½	7
Midland.....	4½	4	4	4
North Eastern.....	7	6½	6½	6½
South Eastern.....	4	3½	3½	3½
Average.....	4.82	4.48	4.40	4.58

(From War's Effect on British Securities, James H. Oliphant & Co., New York, p. 25.)

In the United States, however, we find the guaranteed net income, after the payment of all interest charges, will very much more than insure the payment of dividends and a large surplus for all the principal railroads of the nation.

The guaranteed return for the railroads in the United States, not *in toto*, but *in proportion to the capitalization outstanding*, is approximately \$250,000,000 greater than the return guaranteed to British railroads.

NO INCENTIVE FOR EFFICIENCY

The gravest objection to the proposed legislation now pending in Congress is that it leaves practically no incentive for efficient operation. During this transition period we will have neither

⁴ November 21, 1914, p. 683.

⁵ February 26, 1916, p. 398.

⁶ See below, sec. V, B, 2.

complete private control nor government control in actual practice. The government has the right of unlimited interference in operation, the companies retain the title to the properties, and their employes retain actual physical control of the operation of the plant. During this transition period it would be well if there were some strong incentive for efficient operation. Of course the spirit of patriotism and the desire to do one's duty in times of either peace or war prompt the activities of practically all of us. And yet, it needs but a moment's reflection to recall a very substantial difference in the attitude of the employes for a company at competitive points and at non-competitive points. The stimulus of greater financial reward needs no argument to support it; everybody recognizes it in practically every branch of human industry—except possibly in the ministry and even there the same human stimulus is used constantly. The magic wand of government operation may transform railroad stocks into government bonds, but it will not change railroad managers and engineers into angels; they are still human beings.

The government will present this guaranteed return to the railway companies without any regard to the work that they may perform in the future. They get their 8 per cent or 50 per cent on their stock whether the service they render is poor, good or excellent. And the temptation to discredit government operation will be a powerful factor, although it may be followed unconsciously only.

A suggested compromise might be made that the companies shall be guaranteed their usual interest and dividends, but that they shall have no surplus, except as they may earn it. This surplus should not be capitalized; but the value of improvements to the property in order to sustain the full value of outstanding securities is inestimable and is recognized by all practical railroad men.

CAPITALIZING SURPLUS

The measure now pending before Congress proposes to capitalize the surplus earnings of railway companies. The authors of this measure are asking Congress to reverse a principle which has been adopted unanimously by the Interstate Commerce Commission, in a decision written by Mr. Secretary Franklin K. Lane, while he was a member of that tribunal. They are asking Congress to adopt into law a doctrine which Mr. Lane branded as unjust.

The authors of this measure are asking Congress to adopt into law a doctrine which two of the leading railroad presidents in the nation have stated on the witness stand would be unfair to the public.

The railroad industry is peculiar among the enterprises of the country. By state statutes, acts of Congress and city ordinances we are constantly requiring railroads to build improvements which bring little or no additional revenue, such as elevated tracks, more ornamental depots, etc. They have asked us to help build these things which we require, by allowing them a large surplus over and above reasonable dividends, on condition that they will not capitalize these surplus earnings.

Mr. Ripley, the president of the Santa Fé, testified under oath on the witness stand before the Interstate Commerce Commission in 1910 as follows:

MR. LYON: But, take the condition of a road, we are assuming as the case where you have a dividend of \$10,000,000 and you collect from the public an additional \$10,000,000, and that pays for all necessary improvements demanded by that particular line of railway.

MR. RIPLEY: Well, it might.

MR. LYON: I said assume that it would.

MR. RIPLEY: Yes.

MR. LYON: Then in the future in determining the rate you would not consider the value of that property acquired through the \$10,000,000 taken from the public previously for that purpose?

MR. RIPLEY: No.

Again referring to this money put into the property out of earnings Mr. Lyon asked:

It is their money and they have invested it, and you would not expect any return upon it?

To this Mr. Ripley again replied that he would not.⁷

Mr. Willard, president of the Baltimore and Ohio, and chairman of the committee representing the eastern railroads, testified under oath on the witness stand before the Interstate Commerce Commission in 1910 as follows:

COMMISSIONER LANE: None of your surplus should be capitalized, as I understand you to say?

MR. WILLARD: None of the surplus that has been spent so far on the Baltimore and Ohio has been capitalized and in my opinion it should not be; and when the surplus that I speak of—the 50 cents for each dollar that I speak of which

should be put in the property in each year—is spent, it should not in my opinion be capitalised. My thought is that at least that much money should be spent on the property each year to afford a proper basis of support for the existing securities.

The Interstate Commerce Commission in their unanimous decision in the *Advanced Rate Cases* of 1911, stated, in the language of Mr. Secretary Franklin K. Lane, the following:

There is no justification for the investment of surplus, if it is to have the effect of increasing the rates upon the shipper over the original lines. If the theory is to be recognised that by increasing the value of their property, by putting back operating revenues into the property a carrier may as a legal right increase rates, then the shipper is worse off each time he pays a rate which yields a revenue over and above a reasonable return upon the original investment.⁷

This measure now pending, and which may become law, repudiates the doctrine which has been formally adopted by the Commission, with the approval of the leading railroad witnesses, in a case where that very proposition was squarely at issue, and in a case in which practically all the railroads of the country were parties. The authors of this measure desire to make the shipper pay freight rates adequate to prevent any deficit under government operation, and they desire to guarantee a return on all improvements whether built out of new money or out of earnings, whatever the source may be. If that principle is adopted by Congress it will cost the consumers and producers of this nation almost \$200,000,000 annually; and it will be in defiance of what the Commission and the railroad officials themselves have said is just.⁸

CONCLUSION

The railway companies retain title to their properties, and retain the actual control in practical operation. We protect the

⁷ Senate Document, 61st Congress, pp. 79-80.

⁸ *Western Advanced Rate Case*, 20 I. C. C. 307, 342.

⁹ In partial recognition of the principles discussed in this article it is now quite probable that Congress will pass two amendments to the measure as originally proposed: (1) leaving final jurisdiction over rates with the Interstate Commerce Commission, and (2) providing that the compensation shall not be increased in order to pay a return on improvements built out of surplus during the period of government operation. However, unless further amendments are adopted, the Commission will lose its power of suspending rates pending investigation, the improvements built out of surplus during former years will be capitalised, and the enormous earnings described in the text will be guaranteed by our government to this favored industry.

carriers from the effect on their revenues resulting from the diversion of traffic; but we also shield them from other hazards. If labor becomes scarce, or wages exorbitant, it will not have any effect whatever on the carriers' revenues. If they need more money to put into the plant, we guarantee to furnish it. If repairs cannot be made, we furnish the money to do it later.

If the carrier needs more high-priced materials, we furnish them, and at the same time preserve their net earnings, sacred and untouched, on that high plane they reached in the most prosperous three-year period they ever saw. Other industries do not get this protection. But the railroads are rich and powerful. They own so much property everywhere and control so many newspapers and magazines.

Other industries may feel the blighting effect of the war, and suffer—the railroads will be shielded from all that. With the mighty arm of the great government we select the railroad stockholder from out of the masses of the people. We select this two-thirds of 1 per cent of our population and tell them that they shall go through this terrible ordeal of war absolutely harmless. Others may perish, but these rich powerful railroads shall continue to revel in the greatest prosperity they ever witnessed in all their history.

By the fiat of government we will suddenly transform seventeen thousand million dollars of railroad stocks and bonds into government bonds. Not only that, but we will capitalize all their surplus earnings, although the Supreme Court and the Interstate Commerce Commission, the two highest tribunals in the land, have refused to sanction such a doctrine. We are asked to capitalize the surplus of these railroads although Mr. Ripley of the Santa Fé, and Mr. Willard of the Baltimore and Ohio, on the witness stand under oath, stated that they should not be capitalized.

Brave, true, noble patriots—willing to sacrifice their time and their property, providing of course that they get more for it than ever before. What an inspiring spectacle to give the rest of the country! And what a noble, happy thought it was to select the railroads at this time of trial and sacrifice to inspire us with patriotism. The cold chill that will go out among our people when these facts are really known will be something alarming. Such shortsighted policies as these will but hasten the day of reckoning for American railroads.

In dealing with these questions of large moment, we must have a care for we are adopting principles that will control the operation of the second greatest industry in the nation during the most critical time in our history, except only for the period of the Civil War. And these conclusions that we reach will have a profound effect on any subsequent purchase or regulation of these vast properties. This is not a time for the abandonment of those principles which we have found to be wise and just. In venturing out into the new and the unknown it is well to cling close to the wisdom acquired by the slow process of the experience of the past. In that way, and that way alone, can true progress be accomplished and justice be rendered to all parties.

RAILROAD SECURITY ISSUES UNDER GOVERNMENT OPERATION

BY THOMAS CONWAY, JR., PH.D.

Railroad securities make up a large part of the assets of banks, life insurance companies, of the investments of trust estates and private individuals. The securities of our railroads, until the outbreak of the European War, were held in large amounts by foreign owners. As a result of the liquidation of these European holdings; the attitude of the Interstate Commerce Commission and other regulatory bodies towards the railroad rate problem; and the liquidation of railroad securities by American investors desiring to escape heavy war taxes by shifting their investments to government bonds, the tendency of the market price of railroad stocks and bonds within recent months has been generally downward. This unfavorable movement has been very pronounced since the fall of 1916, the culmination being reached in November and December, 1917, when the prices of many standard railroad issues were below those prevailing in the panic days of 1907.

This decline in railroad security values occurred in a period of unparalleled traffic. The railroads were overwhelmed with business. It was evident that one of the weak links in the chain of American preparedness was the insufficiency of equipment and terminal facilities on the part of most railroads, notably those in the East.

With the flotation of the second Liberty Loan, the marketing of new security issues by private corporations and the refunding of maturing issues became a grave problem. The government was sucking up all of the available investment funds, leaving nothing for the private corporation. For years, our railroads have followed the practice of issuing short time notes,—a hand-to-mouth method of borrowing which many prophesied would sooner or later lead to disaster. According to estimates which have been prepared by Mr. McAdoo, some \$265,000,000 of railroad securities mature and require refinancing in the calendar year 1918. Private bankers were unwilling to undertake large commitments for such purposes under

existing conditions. The failure to refund maturing issues meant an epidemic of railroad receiverships.

GOVERNMENT PLANS OF RAILROAD FINANCE

The railroad problem thus became one of the grave issues confronting the government, the satisfactory solution of which was necessary if the gigantic preparations of the nation were to go forward satisfactorily. Prompted by the three motives of ending the traffic paralysis, taking care of necessary refinancing, and of providing the funds urgently required to extend the facilities of the carriers in order to handle the enormous volume of business which they were called upon to move, the President, on December 26, 1917, issued a proclamation taking over the control and general management of the railroads. In his proclamation, the President outlined in general terms the financial arrangement which he believed to be equitable. Concerning this matter, he said:

While the present authority of the executive suffices for all purposes of administration, and while of course all private interests must for the present give way to the public necessity, it is, I am sure you will agree with me, right and necessary that the owners and creditors of the railways, the holders of their stocks and bonds, should receive from the government an unqualified guarantee that their properties will be maintained throughout the period of federal control in as good repair and as complete equipment as at present, and that the several roads will receive under federal management such compensation as is equitable and just alike to their owners and to the general public. I would suggest the average net railway operating income of the three years ending June 30, 1917. I earnestly recommend that these guarantees be given by appropriate legislation, and given as promptly as circumstances permit.

I need not point out the essential justice of such guarantees and their great influence and significance as elements in the present financial and industrial situation of the country. Indeed, one of the strong arguments for assuming control of the railroads at this time is the financial argument. It is necessary that the values of railway securities should be justly and fairly protected and that the large, financial operations every year necessary in connection with the maintenance, operation and development of the roads should, during the period of the war, be wisely related to the financial operations of the government. Our first duty is, of course, to conserve the common interest and the common safety and to make certain that nothing stands in the way of the successful prosecution of the great war for liberty and justice; but it is also an obligation of public conscience and of public honor that the private interests we disturb should be kept safe from unjust injury, and it is of the utmost consequence to the government itself that all great financial operations should be stabilized and coordinated with the financial operations of the government.

No borrowing should run athwart the borrowings of the federal treasury, and no fundamental industrial values should anywhere be unnecessarily impaired. In the hands of many thousands of small investors in the country, as well as in national banks, in insurance companies, in savings banks, in trust companies, in financial agencies of every kind, railway securities, the sum total of which runs up to some ten or eleven thousand millions, constitute a vital part of the structure of credit, and the unquestioned solidity of that structure must be maintained.

Almost simultaneously, the administration caused to be introduced in Congress a bill carrying out the general policy outlined. The bill provided that during the period of federal control, each railroad should receive—

as its just compensation an income at an annual rate equivalent as nearly as may be to its average net railway operating income for the three years ending June 30, 1917 (called herein standard return); said net railway operating income for the purposes of this act shall, as to carriers making returns to the Interstate Commerce Commission, be computed from such returns, excluding, however, debits and credits arising from the accounts called in the monthly returns leased road rents and miscellaneous rents: *Provided, however,* That no federal taxes in excess of taxes assessed during the year ending June 30, 1917, shall be charged against revenue in computing such standard return. Any net railway operating income in excess of such standard return shall be the property of the United States. The amount of such standard return as accruing during said period of three years shall be determined by the Interstate Commerce Commission, and the certificate of said commission as to the amount of said net railway operating income shall, for the purpose of such agreement and guaranty, be taken as final and conclusive.

During the period of such federal control adequate depreciation and maintenance of the properties of the carriers shall be included as a part of the operating expenses or provided through a reserve fund, in accordance with such principles and rules as shall be determined by the President.

In case of a dispute as to what constituted "the average net railway operating income" of a railroad, the matter should first be referred to a board of three auditors, appointed by the Interstate Commerce Commission, which, after a full hearing, should report to the President the amount due the carrier as just compensation. The bill further provided that in the event of the failure of the carrier and the government representatives to agree upon proper compensation, appeal could be taken by the carrier to the Court of Claims, and that pending the decision of that court, the government should pay to the carrier an amount not exceeding 90 per cent of such standard return, the balance due, if any, as determined by the Court, to bear 6 per cent interest during the period required for the adjudication of the matter.

Additions and improvements made to a railroad while under federal control out of the capital or surplus of the carrier are to receive a return "reckoned at a rate per centum to be fixed by the President" upon the cost of such additions and improvements. Additions and improvements made out of funds advanced by the government are to entitle the carrier to an additional allowance in its earnings "equal to the rate accruing to the United States" upon any advances, thereby enabling the carrier to make payment to the government without encroaching on its own share. The administration bill further provides that:

no carrier, while under federal control, without the prior approval of the President, may declare or pay any dividends in excess of its regular rate of dividend during the three years ended June 30, 1917, *provided, however*, that such carriers as have paid no regular dividends or no dividends during said period may, with the prior approval of the President, pay dividends at such rate as the President may determine.

The Act makes provision for the issue and sale of railroad securities during the period of government control. Section 7 provides:

That for the purpose of providing funds requisite for maturing obligations or for other legal proper expenditures, or for reorganizing railroads in receivership, carriers may, during the period of federal control, issue such bonds, notes, equipment trust certificates, stock and other forms of securities, secured or unsecured by mortgage, as the President may approve as consistent with the public interest. The President may purchase for the United States all or any part of such securities at prices not exceeding par, and may sell such securities whenever in his judgment it is desirable at prices not less than the cost thereof; any sums available from the revolving fund provided in section six may be used for such purchases.

At this time, when only the broad outlines of the President's plan have been sketched in and the administration bill has not emerged from committee, much less received final action in either house, it is impossible to indicate with any degree of exactness the resultant effects upon the carriers. Presuming, however, that the general plan recommended by the President is adopted by Congress and that the intentions of the administration are accurately reflected by Director General McAdoo's testimony before the Congressional committees, a general estimate can be made of the effect of government control during the war.

Director General McAdoo, in testifying before the House Committee on Interstate Commerce, explained the close connection

between financing the railroads and the successful financing of the needs of the government. He said:

Over and above the deficit and other measures now before Congress, the government faces the necessity of raising \$10,000,000,000 between now and June. With our financial situation as it is now—uncertainty largely prevailing—we can do nothing. Our savings banks, investment concerns, and other fiduciary institutions hold \$4,000,000,000 of railroad securities. So long as these institutions are uncertain as to the status of the securities they hold, what income they will get, and what the future holds for their interest and dividends, they are in no position to buy the bonds which we must offer.

At an earlier hearing, he explained that government control was inevitable for two reasons, because:

It was apparent that under private management close coördination of facilities could not be effected, because each of the roads naturally was seeking to get all the business it could. Only under government control could this coördination be achieved. It was also necessary to stabilize, or clarify, the financial situation. There are \$4,000,000,000 of railroad securities held by banks, trust companies, and fiduciary institutions throughout the country. These form a considerable portion of the country's basis of credit. Under existing conditions the shrinking in value of these securities created a serious situation.

Mr. McAdoo also said, "I don't believe a very great sum comparatively will be needed for financing the roads." In commenting upon railroad obligations maturing in 1918, he said "I expect the railroads to take care of those obligations themselves either through re-issue or some other method."

In detailing the needs of the railroads before the House Committee, Mr. McAdoo stated that the necessity for the \$500,000,000 fund proposed in the bill was due in part to need of maintaining and improving the roads and in aiding those in a weak credit position. Asked what sum total the government might finally expend in this manner, he submitted the following figures on the roads' own expenditures for the last five years: 1912, \$477,000,000; 1913, \$600,000,000; 1914, \$550,000,000; 1915, \$263,000,000; 1916, \$281,000,000.

Mr. McAdoo added that he thought the \$500,000,000 should be regarded as a one-year appropriation, and that if government control should last longer, similar sums might have to be asked of Congress periodically. He hoped to add to this sum by the profits which the government, by unified operation and other economies might effect.

With respect to maturities, he said:

I hope the railroads, aided by the government guarantee, will be able to take care of their own. If it should be required, government aid should be given wherever it is necessary to protect the credit position of roads taken over. I assume a first-rate railroad bond, guaranteed as it is by the government, should easily be refunded. The great needs of the government are such at any rate that all bond flotations necessarily will have to be conducted with the approval of the national Treasury.

The response of the market to the President's action showed unmistakably the dread and anxiety which had filled the minds of investors in railroad securities. There was a sharp rise in practically every stock. In the three stock market sessions following the President's announcement, there occurred an advance of more than one-half billion dollars in the market values of the stocks of seventy-eight railroads. Since that time there has been a gradual decline in railroad stock quotations so that by the close of January, 1918, a considerable part of the sharp advance had been offset in many cases.

EFFECTS OF THE GOVERNMENT PLAN OF RAILROAD FINANCE

In advance of the final enactment of a bill carrying out the President's plan for control of the railroads, it is impossible to do more than estimate the effect of government control during the war upon railroad securities upon the basis of the administration's proposal. There is some dispute as to exactly what return is contemplated. In the first place, the item "net railway operating income" as used in the proposed act, appears nowhere in the reports of the Interstate Commerce Commission. In other words, it is necessary to calculate the sum contemplated from the returns as published. Again, the Interstate Commerce Commission's official figures for the fiscal year ended June 30, 1917, are not as yet available. The estimates of the Bureau of Railway Economics and the Interstate Commerce Commission's experts vary considerably as to the return which will be shown when complete figures are at hand. The Interstate Commerce Commission's statement as to what the President's plan contemplates, including its estimate of net railway operating income, for the fiscal year ended June 30, 1917, is as follows:

Year ended June 30	Net Railway Operating Income	Investment in Road and Equipment—Book Value	Ratio of Earnings to Investment—
1915	\$683,104,833	\$16,499,124,491	4.14%
1916	984,872,959	16,872,373,900	5.84%
1917	1,020,800,000	17,250,000,000	5.91%

The Commission estimates the three year average to be 5.31 per cent.

The Bureau of Railway Economics disputes the conclusions of the Commission, alleging that it has more accurate figures than the Commission for the fiscal year ended June 30, 1917, and that by using these figures it finds that the average return would be only 5.22 per cent. An examination of the conclusions of the Commission and of the Bureau shows that the former was estimating on 95.87 per cent of all mileage while the Bureau's estimates covered approximately 86 per cent of the mileage.

Objections to the plan proposed by the President concern individual companies rather than general equities, with the exception of the general objection of the carriers that the year 1915 was the worst year that they had experienced in fifteen years, and that an average made up by the inclusion of this year with two average years was not fair to them, and does not adequately reflect the earning power of the railroads. The reply is made to this objection that the years ended June 30, 1916 and 1917 were unusually good and that in any event war times are abnormal times, and under such conditions the railroads cannot expect a guarantee of a rate of return equal to that which the properties might earn under peace conditions.

The second objection is, that the President's plan is most unjust to the speculative stocks and to stocks of recently reorganized companies. The Missouri Pacific, for example, has recently passed through a drastic reorganization in which a large amount of money was raised through a heavy assessment on the stockholders, whose subscriptions were based upon the reasonable assumption that they would receive a dividend almost immediately. Because of the fact that the receiver put a large part of the earnings of the property into rehabilitation work, the returns shown for the years 1915 and 1916 were very poor, although as a matter of fact the company's earning power had been quite satisfactory. This rehabilitation program is practically completed, and it is argued that the road has a demon-

strated earning power much beyond the amount which would be guaranteed under the President's plan. The stockholders, however, cannot share in these earnings because of the large amount which was invested in the road in two of the three years selected as the basis of calculating the guarantee. It is contended that for similar reasons the Pittsburg & West Virginia, the Western Maryland, the Pere Marquette and the St. Louis-San Francisco railroads will not receive anything like an adequate return under the President's plan.

On the whole, however, the guarantee tremendously strengthens the financial position of the railways. While injustice may be shown in a few cases, yet the amounts which the government guarantees most of the railroad systems are sufficient to enable them to pay their fixed charges. In most cases the balance remaining is considerably in excess of the dividend payments which have been made in the last three years.

It should be emphasized that the government does not guarantee the payment of dividends. The President's plan merely guarantees to the corporation a certain income, which will be disbursed in accordance with the contracts heretofore entered into by the corporation, and actions taken from time to time by the boards of directors. The directors of a railroad can at any time suspend dividends in case they feel that the money should be invested in the property, or if for any reason it seems advisable to conserve resources. The government does not guarantee dividends, but the practical certainty that with the government's aid new capital requirements can be financed makes it likely that dividends heretofore paid will be continued in most cases.

The President's plan will doubtless accomplish the two great aims which he had in mind. It will take care of the problem of refunding the \$265,000,000 of security issues falling due in 1918 and the maturities in subsequent years, in case the war continues. It also makes possible control over railroad financing so as to avoid any conflict with the government's plans. Above all, a method is provided by which the railroads can secure whatever additional money is necessary during the period of the war for the purchase of equipment and the extension of facilities.

THE GOVERNMENT PLAN NOT A PERMANENT SOLUTION

The President's plan in no sense constitutes a permanent solution of the so-called railroad question from the security holders' point of view. It merely preserves the integrity of railroad investments during the period of the war. It does not carry assurance that present prices of railroad securities will be maintained. In fact, it would appear that any general appreciation in the prices of dividend-paying railroad stocks and bonds, above the figures prevailing in the latter part of January, 1918, is hardly to be anticipated, until the conclusion of peace begins to be discounted. It is true that the government's guarantee makes the dividend and interest on railroad securities especially secure, but with standard stock issues selling on a $5\frac{1}{2}$ to $6\frac{1}{2}$ per cent basis and with railroad bonds of the higher grade yielding from 5 to 6 per cent at present prices, the likelihood of further large advances is not very great. So long as the war continues, competition by the government for investment funds will become increasingly insistent. The consequent strain on credit will tend to increase rather than ease up, with the result that investors will demand even a higher yield than now prevails on taxable securities. If the war should last for a number of years taxes will almost certainly increase, with the result that high class taxable investments will suffer by comparison with tax-free government bonds. It must also be remembered that in so far as the security holder is concerned, the earning power of the railroads during the period of the war has to a large extent become fixed. Increased earnings will not mean increased dividends, for it is probable that Congress and the Administration will take the view that the companies' share of excess earnings should go into extensions. The great uncertain element is, of course, the duration of the war, and the extent to which the present situation as regards earning power and methods of operation will be changed before the end is reached. It is furthermore uncertain at the time this article is written, exactly when the government will return the operation of the railroads to their owners. It appears probable, however, that they will be returned within a few months after the conclusion of peace.

The real problem of the railroad security holder concerns his status after his property is returned to him. The old problems of high operating costs and fixed rates; the unwillingness of regulatory

commissions to advance rates; the failure on their part to realize that capital has been gradually forsaking the railroad field, because an attractive return was not offered, must all be faced again. The situation will be aggravated by the practical certainty of high post-war income taxes, which will cause the investor to demand an addition to his rate of return, offsetting at least in part the taxes which he must bear. The most serious element in the situation from the investor's standpoint, is the problem of readjusting railroad wages to a peace basis. It is evident that the administration intends to have no quarrel with the railroad brotherhoods, which means substantial increases in wages. The possibility of reducing wages when living costs decrease after the conclusion of the war, are not at all clear. If it proves impossible to reduce labor costs, the outlook for the railroad security holder upon the return of peace is not very encouraging, particularly when the time is reached—as it must be reached—for a general economic readjustment with a consequent reduction in traffic and in operating revenues. The political significance of a general increase in rates while the roads are under government control would be so profound as to cause every expedient to be used to avoid taking this step. Whatever economies can be effected through centralized control and unified operation will offset in part the higher wages which the Director General will without doubt authorize. Mr. McAdoo, moreover, has indicated that he expects to use the \$500,000,000 appropriation contemplated by the administration bill to constitute the so-called "revolving fund" to meet, among other things, any operating deficiency which may arise.

It is very possible, therefore, that the roads may be returned to their owners operating on a deficit under unified control and with the probability of still larger deficits under individual control. The significance of the wage problem at once assumes its true proportion when this contingency is kept in mind. The future of railway investments, therefore, depends upon the breadth of vision and courage shown by the Interstate Commerce Commission and the state commissions in adjusting rates from time to time so as to assure a fair return and adequate protection to the security holder.

STATUS OF EXISTING RAILROAD LAWS AND REGULATIVE AGENCIES UNDER FEDERAL CONTROL

BY EDGAR WATKINS

The regulation of railroads may for the purposes of this discussion be divided into two categories. These are, the regulations tending to promote competition among railroads and those prescribing a price to be paid for a service.

The orders of the Director General which in effect suspend the anti-pooling section of the Act to Regulate Commerce and the right of the railroads to protection against short hauling, which take from shippers their statutory right to route their freight and which limit the right of the carriers to make traffic agreements, fall in the first category and suspend statutes inconsistent with the full utilization by the government of the property taken over. These statutes may be considered as repealed for the time being by clear intendment of Congress. Accounting rules, the discharge of employes and the issuance of passes, within the terms of the law, are but incidents of possession and use, and freight embargoes are frequently enforced by railroads privately owned. Demurrage charges and regulations are not primarily intended to obtain revenue but to facilitate transportation by the prompt release of cars. If the demurrage charge is small a shipper may be slow to release his car, while a high rate of demurrage stimulates the expeditious loading and unloading of cars. It follows, therefore, that the Director General was effecting a greater utilization of "material and equipment" for "purposes connected with the emergency," when he obtained an increase of the demurrage rates.

What has been done was clearly authorized by the act of Congress under which the Director General was appointed, and he probably could have made effective the demurrage rules without the interposition of the Interstate Commerce Commission.

Similarly there could be no reasonable question of his authority to make rules and regulations as to methods of packing, loading and stowing shipments, and of otherwise protecting and conserving those commodities required by the exigencies of the present

situation. Thus he may say, as the Food Administrator has stated in advertisements, that flimsy boxes should not be used as containers for the transportation of food products. Passenger travel might be curtailed, because to do so would leave available more equipment for the transportation of commodities necessary to supply the public wants.

The provisions of sections 2 and 3 of the Act to Regulate Commerce, which prohibit discriminations and preferences, remain in force, except preferences may be given as stated in the act relied on by the President and quoted above. Similar but less liberal governmental preferences were given by the Hepburn amendment of June 29, 1906.

The shipper's right to a reasonable rate, to allowances for services and instrumentalities furnished, to reparation for damages suffered and to protection against an "increased rate, fare, charge or classification" until "after approval thereof has been secured from the commission,"¹ are not inconsistent with the purposes for which the President was authorized to take possession of the railroads.

These rights of shippers to a fair equality among themselves, to reasonable charges, to allowances in proper cases and to freedom from rate increases without prior approval by the Interstate Commerce Commission are in the second category; and being entirely consistent with the purposes for which the President was authorized to seize the railroads still exist, and it seems clear that Congress has not as yet given the President power to issue all kinds of orders which "shall have paramount authority."

The shipper's rights are subordinate to the needs of the government in connection with the transportation of all persons and commodities used or necessary to the conduct of the war, and to the authority of the President to utilize the railroads for "such other purposes connected with the emergency (created by the war) as may be needful or desirable." "Needful" and "desirable" give the President a discretionary power of wide scope, but such power is the power of utilization of the railroads. If the utilization for the purposes named or for purposes connected with the present

¹ Act of August 9, 1917, amending sec. 15 of the Act to Regulate Commerce. It will be noted that this act was passed nearly a year after the approval of the act under which the director of railroads obtains his power: and that the President seized the roads under authority of a section of an appropriation act passed nearly eight months before Congress declared the existence of a state of war.

emergency and deemed needful or desirable exclude any shipper from the use of the railroads, the statutory power has not been exceeded. If, however, the shipper be not so excluded from such use, the use he receives, limited only by the governmental exigencies, must be on the terms prescribed in the acts to regulate commerce and not on different terms ordered by the Director General.

While the President gives "paramount authority" to the orders of the Director, he means of necessity orders authorized by the act of August 29, 1916, and not orders which would fix charges different from those found reasonable by the Interstate Commerce Commission.

Congress has under consideration bills fixing more definitely the powers to be exercised by the President. The authority to prescribe rates and to make regulations not directly affecting the utilization of equipment, may, in the discretion of Congress, be left with the several commissions; but it may well be argued that a tribunal like the Interstate Commerce Commission composed of nine men cannot act with that promptness demanded by the exigencies arising out of our participation in a great war.

The Interstate Commerce Commission exercises legislative, judicial and administrative functions. It also debates like a legislative body, and delays like judicial tribunals. Its administrative functions can best be left to one man; but its rate making, or legislative function, and its rate judging, or judicial function, will be, if retained, given greater consideration, although not necessarily with more correct conclusions, than if committed to any executive.

Rate making as between the private owner and the shipper is unquestionably a legislative act. There is force in the argument that since the government is the possessor and user of the railroads the charges to be exacted may be prescribed as mere administrative acts. This question is academic as the Congress is proposing legislation which it may lawfully enact, whether or not there exists a difference in power because of the ownership being private or public.

It is proposed in the pending legislation to specify where the authority to make rates shall lie. The argument is made that unless the power is given the Director General to take any action concerning either operation or charge that he may deem needful and proper, he will be unable effectually to meet the public exigency. By others the argument is pressed on the committees of Congress

that to give so great a power to one man is dangerous and that if Congress should give such jurisdiction to the Director General it would be shirking its constitutional obligations by delegating legislative powers.

Congress cannot delegate its legislative authority. It can, however, prescribe a general rule leaving to a delegated person or tribunal to determine when particular facts bring a rate, practice or regulation within the rule. This Congress did when it created the Interstate Commerce Commission, which, when first created, was but part of the Department of the Interior. That the Commission was composed first of five, later of seven and now of nine men, does not change the rule.

The number of men entrusted with power has no relevancy to the legal right to make the appointment of the agency, and one director general can be given all the powers that have been or may be given nine commissioners.

When different agencies have jurisdiction, however carefully delimited, over the same subject matter, there will of necessity arise unforeseen situations presenting questions, difficult of solution, as to which agency has authority. No general line of demarkation of separate authority can make provision for the infinite situations which may from time to time arise. In the present hour of supreme need for prompt and decisive action, there should be one agency with "paramount authority." The ordinary commissions may, in subordination to this agency, be utilized; and, when speed is not necessary, these commissions may be left to hear, discuss and recommend.

HAS THE IMPORTANCE OF FEDERAL VALUATION OF RAILROADS BEEN INCREASED OR LESSENED BY FEDERAL CONTROL OF OPERATION?

BY H. B. WHALING

A report of the general secretary of the President's Conference Committee for the Federal Valuation of Railroads, dated December 31, 1917, stated that up to June 30, 1917, the government had spent about \$9,000,000 and the railways approximately \$16,600,000 on valuation work since the passage of the Physical Valuation Act of March 1, 1913.

Tentative valuations have been served on six carriers with a total mileage of 2,120 miles. Field and track inspection has been completed on 153 roads aggregating 61,333 miles; on 9 more roads totaling 44,017 miles this work is from 75 per cent to 100 per cent completed; it is from 50 per cent to 75 per cent finished on 9 additional lines having a mileage of 36,970 miles; and it is started but less than half done on 186 roads comprising 186,834 miles.

The field and track work is not the most difficult part of the undertaking. After the inventory is made the problem of valuation remains—what unit prices, what deductions for depreciation, etc., almost *ad infinitum*. All in all, the work is probably about one-third completed.

The question presented for discussion in this paper is—Does federal control of operation decrease or increase the importance of this great undertaking? This may best be answered by considering the possible uses of a physical valuation of railways.

A physical valuation may be used (1) to promote intelligent rate regulation, (2) to secure adequate supervision of securities issues, (3) to reach a just value in condemnation cases, and (4) to value non-paying roads for purposes of taxation.

PHYSICAL VALUATION AND RATES

Intelligent control of railway rates presupposes a definite economic policy. Under private ownership and operation it is the purpose of owners to get as much as possible out of the public.

Rates are grossly discriminatory and generally extortionate. Under government regulation or government control it is intended to fix rates so as to shape the railway system to serve and promote the economic needs of the country. But what rate policy will accomplish this end?

The attempt to outline an economic policy of rate fixation leads us immediately to the law of comparative costs—nations, communities, persons should specialize in the production of those goods which they can produce relatively the cheapest. It is manifestly absurd for Iowa, for instance, to try to raise grapefruit or bananas when it can engage more productively in wheat and corn growing. It is no less absurd, save in degree only, for any community to divert its capital and labor from the most productive pursuits to those less productive. If the principle of comparative costs is operative there is secured a maximum utilization of resources—human and natural. Conversely, anything that interferes with the working out of this law induces an economic loss.

It is clear that the railways are the arteries of trade and that upon the proper functioning of them depends the economic movement of goods from one community to another. If rates, in the aggregate, are too high, internal commerce is restricted, or what is the same thing, the law of comparative costs is prevented from freely working, with the result that communities are forced to produce goods which they could otherwise get less expensively in exchange and productive agents are employed at less than the maximum advantage. By a like sign, if rates in total are too low, not enough capital will flow into the railway business and internal commerce is diminished with a resultant economic loss. Also, if rates are made too high to one community and too low to another the benefits of trade are destroyed, for if a community cannot ship goods out it cannot ship them in. Thus extortionate rates, confiscatory rates and discriminatory rates are economically bad.

The latter evil may be remedied by applying the principle of joint cost to railway tariffs: the two former give rise to the problem of valuation. It is this problem that involves the question of a physical valuation. To it attention is directed.

It will hardly be questioned, I believe, that if competition prevails the law of comparative costs will operate with the result that the maximum utilization of human and natural resources is achieved.

On the other hand, monopoly, by restricting the supply and by preventing the working out of the principle of comparative costs, signifies an economic loss. If the monopoly is a natural one it cannot be prevented by regulation, but it may be so controlled, through fixing its prices, as to secure the result, if not the fact, of competition, and it is the result of normal competition that is desirable.

Under competitive conditions it is ordinarily true that the value of a business equals the amount of capital invested in it. But otherwise, a competitive business can earn no more than a normal return on the capital actually invested in the enterprise. If we reverse the process in the case of monopoly and fix a price which allows to the monopoly no more than a normal return on investment we achieve the results of competition and secure the most productive use of economic agents.

Railways, of course, are characteristically monopolistic. Consequently, it should be a tenet of regulative policy to fix rates so as to permit the accrual of a normal net return to investment equal to what could be had in competitive businesses of a similar degree of risk. This is a full application of the doctrine of comparative costs.

The determination of investment without a physical valuation is inconceivable. Thus it becomes clear how important it is to have such a valuation. It is, of course, not contended that there are not intangible elements in valuation, but it is maintained that intelligent valuation and rate regulation are not possible without a physical valuation.

Since the aim of rate fixing is to fashion the railway system to serve economic welfare best, it can make no difference whether the government controls or only regulates the roads. Legal title would not change the nature of the economic problems involved. It is, therefore, patent that the recent action of the government in assuming control of operation, permanently or only temporarily, can have no effect on the importance of a physical valuation. From the point of view of rates, it is neither more important nor less important that the task begun should be completed.

PHYSICAL VALUATION AND SECURITIES

Railway securities have afforded a most delectable field for financial manipulation. The Alton, the New Haven, the Rock Island and many others are classic instances. In 1898 Alton stock was

selling well above par—the surplus of the road was approximately \$7,000,000 and net earnings easily large enough to maintain 8 per cent dividends. Under the “able” leadership of Mr. Harriman, in seven years, the capitalization was expanded from \$34,000,000 to \$114,000,000 while property to the extent of only \$18,000,000 was acquired. In essence, the sound credit and excellent reputation of the Alton, built up through years of conservative management, was overcapitalized and sold to an unsuspecting public. The New Haven paid reckless prices for steam and trolley lines in the effort to create a transportation monopoly in New England with the result that it was greatly overcapitalized and its stock fell from \$200 to somewhere near \$50. The Rock Island regularly paid dividends out of capital, failing to set aside enough to cover depreciation because paying fancy prices to insiders for subsidiary lines. The result—the once prosperous road was swamped, nay drowned, in water of the characteristic muddy financial sort. And so on we might extend the sickening list—but enough.

In all this manipulation the public and the investor are interested. If rates are allowed high enough to pay dividends on the watered stock they are extortionate and trade is restrained. If rates are made so as to allow a return on investment without regard to the outstanding securities, dividends cannot be paid thereon, the credit of the company suffers, funds for extensions cannot be had, adequate transportation facilities cannot be furnished, and trade is diminished. In both cases the public loses. Likewise, of course, the investor is mulcted out of his investment.

Only the financial buccaneer gains. He should be made to disgorge in so far as possible—but it is high time that such manipulation be stopped and this can be done only by government supervision or control of security issues. The government may, in the case of private operation, either authorize issues or enforce publicity. The latter is probably preferable.

Whichever method is adopted makes no difference in so far as physical valuation is concerned. Proper control of securities issues requires sound accounting and sound accounting is based on physical valuation. It would not have been possible to pull off the Alton and other deals if the actual value of the property had been known and if the public had been informed of the disposition of the

proceeds of the securities sales. Physical valuation, sound accounting, publicity,—here lies the remedy for financial troubles.

It can make no difference whether the government merely supervises security issues, or takes over the roads permanently and issues its own securities, the financial problem is the same. Again, then, the necessity for having a physical valuation is not changed.

PHYSICAL VALUATION AND CONDEMNATION

It is, I believe, usually considered that physical valuation is essential to condemnation proceedings. This is true, but not in the sense generally meant. If the government fixes rates or permits rates which give a certain earning power and consequently establish a certain market value of the railway securities, it ought in a purchase case to pay a price for the railways indicated by market value of securities (averaged over a period of years, of course) and not by physical value. It may be true that there is an element of monopoly returns in the earnings, but securities have been issued thereon, and equities have been established which it is not just to disturb. It is possible to reach the desired end by a progressive income tax and by a still more progressive inheritance tax, the proceeds of which may be used to amortize the securities representing the monopoly element in return. However, it is far from clear how pillaging the investor for the sake of the public is justifiable. But in the event that the road has been "skinned," *i.e.*, depreciation not taken care of, a physical valuation would be serviceable in condemnation cases. This question always arises—hence condemnation cases require the use of such a value.

In my estimation, the recent policy of the government in guaranteeing the net earnings averaged for a period of years is sound economically.

PHYSICAL VALUATION AND TAXATION

For purposes of taxation, value depends primarily upon net earnings, but for non-paying roads a "dismembered selling value" is useful. This contention rests on the theory that goods should be put to the most economic use and if one railway cannot use them gainfully they should still be taxed at the price another railway, or another business of any sort, will pay for them.

By way of summary it may be reiterated that a physical valua-

tion is essential (1) to economic regulation of rates, (2) for the protection of investors, (3) in establishing a purchase price in certain cases, and (4) for the determination of a taxable value in the case of non-paying roads. With regard to the first two points especially, economic policy rests on a physical valuation. If the government only regulates railways or if the government continues to operate them as a public business its policy cannot economically be different, nor can it be successful without the means of determining investment, namely, a physical valuation. It is, therefore, necessary that the work now being done under the direction of the Interstate Commerce Commission go on to completion.

CONTROL OF RAILROADS AFTER THE WAR

HENRY A. PALMER

It might be asked why it should be assumed that there will be or should be a change after the war in the plan of railroad control in effect before the war. In other words, in what manner has the war—which has caused a temporary change to government operation to meet a serious emergency, but for that emergency only—made it incumbent on the country to revise its method of regulating the common carriers? Most certainly it does not follow that, merely because there has been a change in methods to meet war conditions, there should be a permanent change. But just as certainly it is true that the exigencies of war have emphasized some of the weaknesses in our methods of regulation and that it would be folly not to cure them now that they have been so plainly exposed. And just as certainly it is true that the necessary war operation of the railroads by the government has demonstrated methods by which efficiency may be increased through their permanent application, and not to take advantage of this knowledge would be equally foolish. So, not as a natural consequence, but merely because we have already learned many ways in which our handling of the transportation problem may be improved, and will doubtless learn many more before the war is over, it does follow that after the war, when the railroads are returned as they should be to their owners, there must be some revision in the machinery by which they are regulated: this, both for their own benefit and that of the shipping public.

No one ought to attempt to say now with any degree of exactness what the after-the-war method should be. We are going through a historic period in railroad regulation and the experiment of government operation is as yet too new to justify any definite attempt at permanent application of the lessons learned—at least as long as there is so little prospect of an early end to the course of study. Whether we agree with what the government has done or not, it is done, and government operation will continue to the end of the war. We have all that time for observation and consideration as to what should be done when peace comes. Within a cer-

tain definite period after the end of the war, government operation should cease and railroad control should automatically revert to the owners of the property. Then we should be prepared to enact, within that period, well considered, thoroughly scientific railroad regulation legislation, based not only on what was known before the war, but also on what we have learned while the war was in progress.

OPINIONS REGARDING PUBLIC POLICY AFTER WAR

If government operation of the railroads during the war for the purpose for which they were taken over is a success—as it ought to be and doubtless will be—there will be a great cry for government ownership. Already the preliminary notes have been heard. Of course, it does not at all follow that, because the government with the autocratic power given to the Director General of Railways in a war emergency can accomplish what the carriers themselves, hampered by law and custom and regard for the rights and comforts of their patrons, as well as for their own profits, could not accomplish, government ownership would be the proper nostrum. The arguments for and against such ownership are too well known to be entered into here. It is sufficient to say that the success of the government in accomplishing a war time task under war time powers at a cost of great sacrifice by commercial interests, would not be a legitimate added argument in its favor; while as an added argument against it is to be counted the fact that the government will hardly be in shape at the end of the war to assume such a huge financial burden.

As to whether there shall be some permanent plan of government control or operation short of actual ownership but akin to the present war plan, the question divides those who would put into effect a non-competitive system under government auspices from those who see no reason, because we have had a war, that the business methods of private ownership should not, in general, continue to govern. No one can dispute, of course, that if the government owned or controlled all the railroads and would work out and enforce an efficient plan, millions of dollars in duplicate salaries, duplicate trains, duplicate rents, duplicate service and facilities of all kinds could be saved. But they could also be saved if the government operated all the grocery stores, or all the coal mines, or all the churches. We may some time reach that Utopia but the time is

not yet, either through government ownership or any other form of paternalism.

NEEDED REFORMS IN RAILROAD REGULATION

Let us lay down, then, as the first general principle of the new system of regulation, that the railroads are to remain in private ownership, but with the added degree of government control that is necessary to the fair accomplishment of some of the reforms that seem to be wise. As the second, let us say that all laws that have hampered them in efficiency are to be repealed or amended so that, though injustice may not be done, the carriers will still be able to do things dictated by good business judgment which they are now prevented from doing. As the third, let us say that as far as possible or wise, all things considered, the railroads shall be compelled by law to do the things that have been demonstrated as efficient for them to do but which, of their own will, they have refrained from doing. In other words, let the railroads continue to operate under the same general plan of private control and ownership as before the war, with more liberality toward them as to the things they are permitted to do and greater strictness as to things they are compelled to do—which carries with it the idea of greater powers in some regulatory body, though those powers would be used for the carriers' benefit as well as for the repression of any improper desires on their part.

To start with, let us do away with the multiplicity of regulating bodies, the celebrated forty-nine masters, and center the regulating power in one federal body, the Interstate Commerce Commission. Let us do away with the state commissions as railway regulators except as they may continue to exercise mere police powers and, possibly, as they may continue to regulate railways that are purely intrastate. There are those who say this is not legally possible but there are others who say it is. But so far as it is legally possible it should be done and every effort should be made to determine its legal possibility. It is ridiculous and highly productive of inefficiency and unfairness that, for instance, a train must have one kind of crew in one state and a different kind in another; or that the fare should be fixed at one rate in one state and at a different rate in another, both, perhaps, varying from the interstate rate. The railroads, whatever their paper form of organization or what-

ever the rights of states to regulate them, are a national system in reality and in so far as they are not permitted or compelled to operate as such they must fall short in efficiency.

It is true that this doctrine is shocking to some as an attempt to invade the sanctity of so-called state rights. But there is nothing sacred about the theory of state rights or any other political theory. If it does not hold water it should be cast aside. And, besides, there are those of no small ability and legal lore who hold that the doctrine of state rights is not incompatible with centralized federal regulation of railroads—indeed, that the two go hand in hand in that the real and highest right of a state is to be protected from discrimination by reason of the act of another state. These are questions for the lawyers, but they should be threshed out with a view to constructing an efficient system.

There must be a more definite government policy with respect to the revenue railroads are allowed to earn. As things are now, the Interstate Commerce Commission regulates rates—and the rate regulating power should remain in that body, war or no war—but there is always dispute and never certainty as to just how far the Commission may use its judgment in deciding whether the revenues of the carriers are sufficient. The inclination, in the absence of a definite declaration by Congress on the subject, is to confine consideration to the questions of reasonableness and discrimination. There should, perhaps, be fixed a minimum net return.

Even with such a provision we should be confronted by the vexed question of whether a certain general increase, which the weak roads need, should be allowed when it would swell the revenue of the more prosperous roads to unreasonable proportions. This brings us to the subject of the pooling of traffic and revenues, now illegal. It should be made legal, within certain limits. The stockholders of a given road should have reasonable assurance that, so long as the road was properly operated and necessary at all in the scheme of things, it would earn for them no less than a certain percentage of return. It might earn as much more as good management and general conditions warranted. Such a plan, to be sure, unless carefully worked out, might provide for the prosperous continuance of a road that really had no reason for living or for making money out of its existence. There would have to be government participation in deciding whether a given road should share in the

promise of minimum return, and that power of participation would have to be wisely exercised. The strict rule of the survival of the fittest cannot be applied to the railroad situation for the reason that we have to take things as they are and not as they might be if we could start from nothing to build a new transportation scheme. Communities and businesses have grown up on the basis of the present system. They cannot be wiped out in the effort for absolute efficiency. The best that may be done is to empower an able commission to handle the situation with due regard for all existing interests to the end that necessary roads may not perish for lack of revenue but that those more fortunately situated may contribute somewhat of their prosperity. Doubtless repeal of the anti-pooling laws would accomplish all that is desired if the repealing act were accompanied by wise legislation safeguarding all interests. The first essential is to determine the policy. If it be the policy to enable our present railroads to continue to exist, and that by means of some plan which shall operate to distribute profits somewhat more equitably, and at the same time bring greater facility in the handling of the country's business by the pooling of traffic, then the rest is comparatively easy, a matter of detail. Such a plan would not be solely nor even chiefly for the benefit of the carriers. The shipping public would profit. Rates would probably be no higher than they otherwise would be and service would be better.

POOLING OF FACILITIES

The pooling, or common use, of railroad facilities is already legal and was tried even before the government took over the roads with some degree of success by the eastern carriers. It should be made compulsory, within proper limits. The purpose of transportation is to get freight and passengers moved and the reason for congestion is that they are not moved. If we are to consider transportation nationally there is no reason why a road possessing facilities that will help in the moving of this traffic should not be compelled to permit their use to the utmost by anybody that can use them for the necessary purpose, provided, of course, that the rights of the owner to due compensation are protected. It might be urged that if a given railroad knew that some facility it might build—a new terminal, for instance—could be used by any road that wished to use it, it might refrain from building it. But here the govern-

ment should take a hand. When facilities are needed it should compel the railroads to provide them, and there would be no hardship or injustice in its doing so as long as it provided for the necessary revenue.

The one great transportation lesson of this war is that the railroads have not kept pace in the matter of rolling stock and terminal facilities with the growing needs of the country, even aside from the war emergency. They must be made to do so, for in the sense that transportation is a commodity to which the public is entitled at reasonable rates, the railroads cannot be operated as a private business. But they cannot be expected or even compelled to do so unless their income is sufficient to justify the necessary expenditures. Rates and service to the public are coördinate questions and must be handled by the same authority in accordance with a well defined policy.

As a means of bringing about more expeditious loading and unloading of cars by shippers and consignees, higher demurrage charges are being tried by order of the Director General of Railways and the Interstate Commerce Commission. In so far as they achieve the object desired they are perfectly proper. The question of propriety is merely one of efficacy. There is as yet no scientific system of such charges for that purpose. There should be one, and now is the time to make the preliminary study.

SPEED IN MOVING FREIGHT

But while penalizing the shipper and the consignee for failure to reach efficiency in their part of the transportation operation, why not compel the carriers, by some similar system of penalties, to move freight more promptly? No inconsiderable part of the delay resulting in demurrage is attributable to the faults of the carriers themselves. Figures are easily obtainable showing the unreasonable time consumed in transit and the same is true with regard to delays at terminals. Daniel Willard, president of the Baltimore and Ohio railroad, has pointed out that 52 per cent of the time of a freight car is wasted around terminals and that it is moving on the road only 11 per cent of its time. When from this 11 per cent is deducted the time wasted in slow movement, the freight car as a medium of transportation does not make much of a showing.

Mr. Willard's statement was made last July. Doubtless the

showing was in great measure due to the tangle brought on by the war congestion, but not all of it was thus due. There is, perhaps, no greater field for improvement in transportation than in the movement of freight cars, and shippers complain greatly at being held up by the reformers as horrible examples when they know that the railroads themselves are at least as greatly to blame. The government, by its authorized system of penalties, compels or tries to compel the shipper to be efficient. It should exercise the same degree of compulsion toward the carrier.

There should be a clearer determination as to the rights and duties of carriers in the matter of embargo, as to when an embargo may be declared and what notice shall be given, both to other roads affected and to shippers. The practice is loose and productive of much confusion and dissatisfaction.

A. H. Smith, eastern assistant to the Director General, recently instructed eastern roads to embargo consignees who do not unload cars promptly, regardless of demurrage rules. This is an order perhaps necessary and proper under war operation, if it is carried out under the direction of government authorities, but there is nothing in law to prevent such an embargo at the will of the railroads in ordinary times when, in their opinion, necessity requires it. Probably there are few railroad men whose judgment could be depended on in a matter of that kind, and even if the motive were admittedly proper the shipper is entitled to know that he has recourse and that his interests are protected.

Another result of war operation of the railroads has been the overriding of the law giving to the shipper the right to direct the routing of his freight. It is certainly in the interest of efficiency that this be done, though perhaps the Director General exceeded his legal power in doing it. Perhaps the right ought permanently to be taken away by law within certain limits. The shipper ought, no doubt, to be permitted to control delivery. That is, though freight should be sent by way of the route most likely to afford expeditious movement and not by the route some persuasive agent has induced the shipper to select, the shipper ought to be protected to the extent that the freight will be switched without cost to him to the road on which he has his place of business or sidetrack, from the road which has been selected as the most expeditious route.

There should be provision for compulsory arbitration of wage

demands which would carry with it a practically automatic increase in rates to meet the wage increase when such an increase is permitted or ordered by the government. Another performance like the clubbing through Congress by the labor unions of the Adamson eight-hour wage law, leaving the railroads to find, as best they may, the money to meet the increase, should be made impossible.

Still another reform that has been many times urged and generally overlooked, apparently because it is held of comparatively slight importance, is the giving to the shipper right to appeal from negative orders of the Interstate Commerce Commission. Important or not, it is his right, or should be, and should be given him for the asking. The less important it is the less trouble it would be to grant it.

There has been no attempt herein to outline any dogmatic plan for a reorganization of the plan of railroad control. Not only is the future of the railroads uncertain but it is not altogether certain what that future should be. The attempt has been merely to suggest some changes that would appear at this time to be wise.

RECONSTITUTING RAILROAD REGULATION

BY GEORGE A. POST

"What," I am asked, "is involved in reconstituting the agencies of railroad regulation?" As I enter upon the adventure of redeeming a promise made long ago to discuss that question for *The Annals* the agencies of railroad regulation have been deposited for the most part in cold storage and the railroads themselves have been reconstituted, with a vista of future reconstitution which no wise man will attempt to prefigure.

The only reason why the Editor of *The Annals* would invite an expression from me is that I happen to bear the honor of being President of the Railway Business Association, a national organization of manufacturers, merchants and engineers who deal with railways. Hence the only reason why I should express views upon the transportation question is because the Railway Business Association had formulated a program. We had formulated proposals before the United States entered the war, but here we are with a new heaven and a new earth and I cannot yet speak for my associates with authority on the altered aspects as they now confront us.

As purveyors of equipment and supplies we have in the past dealt with the employees of railroad corporations whose owners were legion. Today we deal with the same individuals, but they are now government officers. What further evolution in our commercial transactions the war may bring as it wears on we shall greet with equanimity and with a determination to perform our utmost for the success of the temporary government operation necessitated by the war.

Concerning the status which shall follow the conclusion of peace I can only utter my individual hopes. Miles of good white paper have been consumed in foretelling what will be different after the war. Certain things, I pray heaven, will be the same after the war—the same that they have been since that bleak day 297 years ago when the Pilgrims entered the wilderness at Plymouth Rock.

Now what is meant by the competition which it is desirable to preserve as a feature of the new railroad structure that is to supersede government operation after the conclusion of peace? Mighty

few hard-headed citizens will feel inclined to give up the advantages which unification has given both under the Railroads' War Board from April to December and under the government Director General since—advantages arising from mobilization of rolling stock without regard to ownership, common use of facilities and the routing for directness and cheapness as distinguished from earnings for individual railroad corporations. Foolish competition seems more susceptible to modification than before the war. The government is performing functions which previously business men performed. The conditions under which business men did their work were those of compulsory competition indiscriminately comprehensive. The government has promptly removed from its own path some of these obstacles. Whatever we have gained in transportation by substituting coöperation for competition we shall keep, in so far as such retention is consistent with retention of competitive elements essential to progress.

Competition is not confined to rivalry between corporations. Competition exists among the officers and employes of each corporation for promotion. That is the first condition which I hope will be preserved the same in transportation after the war.

As I write, news comes that the Director General of Railroads has divided the country into three regions and appointed as regional managers three men—A. H. Smith, R. H. Aishton and C. H. Markham. Who are these men? Mr. Smith entered the service of the Lake Shore & Michigan Southern Railway as a messenger boy in 1879 and in 1914 had reached the presidency of the New York Central Lines. Mr. Aishton in 1878 was an axman in the engineer corps of the Chicago & Northwestern Railway and in 1916 became president of the same company, having like Mr. Smith made his way through the grades. Mr. Markham in 1881 was a section laborer on the Atchison, Topeka & Santa Fé and after a rapid rise within the Santa Fé organization was induced by the Southern Pacific to become general freight and passenger agent of its Oregon lines in 1897, being appointed general manager of the Southern Pacific in 1904. After a period passed in the management of petroleum companies he was elected in 1911 president of the Illinois Central Railroad. Each of the three is the product of rivalry for advancement within an operating railroad unit. We do not know where the Director General of Railroads would have found men to

be regional managers under the war régime if the railroad organizations which I have mentioned had not existed. What we do know is that those organizations did exist as institutions within which advancement was open to the humblest beginner, whom no influence but his own incapacity or delinquency could repress and who needed no influence but his own ability and energy for the ascent to the topmost rung. The men were there when the country called and it was in those organizations that they were trained.

Important, however, as competition is within the organization it is equally important between railroad organizations. Every management knows that its performance will be measured by the foremost achievement of its contemporaries. Every aspirant is stimulated by the knowledge that leadership in achievement by him will bring opportunity for advancement by transfer to other companies.

As a manufacturer of railway appliances I contemplate with satisfaction and zest the preservation of a substantial number of independent railroad units. The progress of the art toward increase of safety, speed, convenience and cheapness by the development of new inventions is a fascinating story of indifference or opposition by one railroad and appeal by the developer to another and another until a test is somewhere accorded, a demonstration afforded and the qualities of the discovery made known in practice. Let us preserve the appeal; in that way lies progress.

If citizens in their individual capacity are to subscribe the capital and be responsible for the management of the railways under regulation, one new and untried element must be introduced into regulation. The government must hold some one of its branches responsible for keeping watch over railway revenues and when they are inadequate for proper service, including the attraction of new capital for additions, betterments and extensions, this branch must take steps to correct the deficiency.

Every student of current discussion and events knows that numerous aspects other than those to which I have referred are under debate and to many it will seem that some of those which I have not specified are too important to be omitted even from so highly condensed a statement as this. Nevertheless I am content to specify at this time these two elementals—individual initiative and adequacy of revenue—as the essential factors in a national railway system.

A SUGGESTED PLAN FOR PERMANENT GOVERNMENTAL SUPERVISION OF RAILROAD OPERATION AFTER THE WAR

BY ALEXANDER W. SMITH

The operation of the railroads as a war measure presents one of the most drastic economic revolutions in our history. Regardless of the duration of the war, the complications springing out of governmental operation will probably preclude a return to the old system. Many divergent but coöperating interests will oppose such a return. The grafters, if such there be, will desire to continue their graft. The politicians will covet the patronage and power which will flow from government operation in ever increasing volume. No doubt a majority of the security holders will prefer to sell out to the government. Certainly so, if too great a sacrifice is not enforced. The combined force of these selfish interests, which may be expected to organize for mutual profit and protection, will override the public interest unless a counter campaign is launched early in the contest. As is usual under popular rule, education is our only weapon in defense of the general welfare.

Thinking people are alive to the fact that the interests of the shipper and passenger far outweigh all other interests in the problem. Some permanent plan should be promptly thought out and crystallized in the hope of at once satisfying the advocates and opponents of outright government ownership.

THE PLAN FOR REGIONAL FEDERAL HOLDING COMPANIES

Hon. William W. Cook of the New York Bar, a prominent and successful corporation lawyer, has filed with the Joint Committee on Interstate Commerce at Washington, "A Proposed Solution of the Railroad Problem."

He went to the pains of reducing his proposition to the concrete form of a bill which he appends to his paper. He digests this bill in these words:

1.—Congress should incorporate five Federal Railroad Companies for five divisions of the whole country. This corresponds to the plan of the twelve Federal Reserve Banks.

2.—The five Federal Railroad Companies would acquire gradually the stocks and bonds of the present railroad companies, each in its own district, just as the Canadian Government is about to acquire the stock of the Canadian Northern Railway Company. These stocks and bonds would be acquired at their actual value by purchase, exchange or condemnation. The Federal Railroad Companies could obtain the money by the issue of their own stock with 3 per cent dividends guaranteed by the government, with a possible extra 3 per cent if earned, all over 6 per cent to go to the government. Such guaranteed stock would also be issued to provide fresh money for railroad extensions and additional facilities; also to acquire from time to time at their actual value the present outstanding railroad obligations. The guaranteed dividends could be at a higher rate than 3 per cent, if necessary, and would vary from time to time according to the general conditions, but when once fixed as to any particular issue would not be subsequently changed for that issue.

3.—The Federal Railroad Companies would then control the present railroad companies and could take over their tangible property if the state charters ceased to be desirable, or could condemn the railroads if necessary.

4.—A Federal Railroad Board (similar to the present Federal Reserve Board) nominated by the President and confirmed by the Senate; would name the directors of the five Federal Railroad Companies and would control the finances of those companies and regulate all railroad rates and service.

5.—The plan embodies the idea of government control and government financial responsibility (reduced to a minimum) without government ownership.

The plan contemplates the acquirement by these federal railroad companies not only of the present railroad stocks and bonds, but the railroads themselves by condemnation if necessary. The learned author replies to the suggestion that his plan merely draws "a thin veil over government ownership" by saying "its sole purpose is to avert government ownership"; that government ownership would mean an additional national debt of about twenty billion dollars, while his plan would not. Yet his plans guarantee minimum dividends, and certainly dividends come behind all operating expenses and fixed charges. One had as well owe a debt literally as to underwrite indefinite payment of dividends on stock of the corporation which does owe it. For the same reason, while state taxation may be continued (by permission of the federal government only after it acquires the railroads under said plan), the taxes paid would be chargeable to earnings before dividends could be declared. Hence the government guaranty of dividends would underwrite the payment of taxes due the states. Further quoting from Mr. Cook:

All this is to be done gradually, to avoid shocks, waste, unfair prices and hasty inexperience. The railroads themselves, however, propose to you that Congress shall pass a law that the present railroads shall take out Federal charters at once or else cease doing interstate business on a certain date. This is to be done under power of Congress to "regulate" commerce. Power to "regulate" \$17,000,000,000 of property is alleged to give power to destroy \$17,000,000,000 by forbidding its use unless it turns itself inside out by accepting a federal charter. That is hardly "due process of law." To the ordinary mind it would seem that the penalty of death does not fit the fictitious crime of holding on to a state charter which everybody admits is legal.

And the old corporations are to continue. Certainly Congress cannot dissolve them, and hence the new Federal corporations will have two charters, one from the state and one from Congress, with inextricable conflict, litigation and Pandora box confusion. The railroads themselves cannot afford to have compound charters. We would still have conflict of state regulation with national regulation; state commissions with Interstate Commerce Commission; state persecution with national intervention.

It is a fair deduction that the creation of regional federal holding companies in Mr. Cook's plan was designed as a substitute for federal incorporation of existing railroad companies. His novel and interesting plan is an application to the railroads of the organic plan of the federal reserve banking system. It is submitted that the parallelism is carried too far. A banking corporation has no physical attachment to its location. Being purely a financial institution, it is capable of complete liquidation without materially affecting the particular community it was wont to serve. Not so with a railroad. Once established and located, it becomes an integral part of the life of the communities it traverses. Investment in real estate for all commercial, industrial and domestic uses is invited. Much of the value, and frequently all of the utility, of such property springs from and depends upon the continued operation of the railroad. The elements of support and expansion of banks are liquid and easily converted, while with railroads they are permanent physical additions, such as yards, terminals, warehouses, etc.

The location of districts, and establishment of federal reserve banks therein, serve a useful purpose in stabilizing and equalizing the available banking capital and reserves. Districts for the general operation of government-controlled railroads would serve no useful purpose, but would tend to increase the opportunities for political interference in playing one section against another, although the

country may be divided into regional districts for special purposes from time to time.

A FEDERAL RAILROAD BOARD

If, however, the suggestion of regional federal railroad holding companies, which Mr. Cook elaborates, is not feasible, the establishment of a Federal Railroad Board along the lines suggested by him is a most valuable element in the solution of the problem of permanent and practical government control of railroads short of government ownership. Omitting the functions and attributes applicable to the holding companies, the composition of this Board is admirably stated by Mr. Cook as follows:

A Federal Railroad Board is hereby created which shall consist of six members, one to be the Secretary of Railroads, and the remaining five members to be appointed by the President of the United States, by and with the advice and consent of the Senate. In selecting the said five members of the Federal Railroad Board, not more than one shall be selected from any one Federal Railroad district. The said five members shall devote their entire time to the business of the Federal Railroad Board and shall each receive an annual salary of twelve thousand dollars, payable monthly, together with actual necessary traveling expenses.

. No Senator or Representative in Congress shall during his term of office, or for five years thereafter, be a member of the Federal Railroad Board. The members of the said Board shall be ineligible during the time they are in office, and for two years thereafter, to hold any office, position or employment in any railroad company, and shall not, during that time, hold or own stock therein. At least one of said five members shall be a person, experienced in the management and operation of railroads. One member shall be designated by the President to serve two years, one for four, one for six, one for eight and one for ten years; and thereafter, each member so appointed shall serve for a term of ten years unless removed for cause by the President.

As the function of this Board is to control and regulate rates, securities, service and operation, it would obviously supersede the Interstate Commerce Commission.

Full credit is due Mr. Cook for the valuable suggestions he has made, but it is submitted that the adoption of his plan would but open an easy pathway to government ownership instead of proving a substitute for it.

THE FEDERAL INCORPORATION OF RAILROADS

The idea of federal incorporation of railroads hitherto developed by the representatives of the railroad interests before the Congressional Joint Committee seems to contemplate merely the

creation of new federal railroad companies into which existing systems are to be transferred, and this idea seems to have been in the mind of Mr. Cook when he criticizes the proposed plan as being an arbitrary and summary transfer of the title to \$17,000,000,000 of property from the present owners to new corporations. Obviously, such a proceeding would not only be illegal and unconstitutional, but wholly impractical. However, there seems to be neither a constitutional nor practical objection to nationalizing existing state railroad companies just as under the Act of Congress any state bank may be nationalized.

It is settled law that the conversion of a state bank into a national bank does not destroy the identity or corporate existence of the bank nor discharge it as a national bank from any of its liabilities outstanding at the time of the conversion. Such conversion does not close the business of banking under the state charter, but simply results in a continuation of the same body with the same officers and stockholders, the same property, assets and banking business under a changed jurisdiction. It remains one and the same bank and goes on doing business uninterruptedly.¹

In the earlier history of this government, the question of jurisdiction of Congress over banking business occasioned much litigation and bitter diversity of political opinion, until finally settled by the authoritative ruling of the Supreme Court under Chief Justice Marshall.² Certainly the basis of jurisdiction over banks is no firmer than the express commitment to Congress of exclusive jurisdiction to regulate interstate commerce. Inasmuch, however, as the basis of the jurisdiction of Congress over banks rests upon the general delegation of power to execute other powers in the Constitution, a bank must become an instrument in the prosecution of the fiscal operations of the government before Congress obtains jurisdiction. In like manner, a railroad created by a state must engage in interstate commerce before jurisdiction over it is vested in Congress. But nationalization of a bank is a condition precedent to its becoming an instrument in the prosecution of the fiscal operations of the government, whereas a state railroad is authorized to engage in interstate commerce (in the absence of a law of Congress prohibiting it) without the necessity of a federal charter.

¹ *Metropolitan National Bank v. Claggett*, 141 U. S. 520.

² *McCulloch v. Maryland*, 4 Wheaton, 316.

This distinction is most important when you come to consider whether or not Congress can compel a state corporation to become a national corporation. It may or may not be within the power of Congress to compel a state bank to become an instrument in the prosecution of the national government's fiscal operations by taking out a federal charter. That question is foreign to the present discussion. That Congress has the power to *compel* a railroad corporation created by a state and engaged in interstate commerce, to take out a federal charter is a condition precedent to the inauguration of the plan herein proposed. Whether or not this power exists is, therefore, a question which demands solution.

The power of creating a corporation is never used for its own sake, but for the purpose of effecting something else.³ It was, therefore, held to be within the discretion of Congress to create and use banks as convenient, useful and essential instruments in the prosecution of the fiscal operations of the government. The power to do so is derived from the general clause delegating power to make all laws necessary or proper to execute the other powers delegated in the Constitution.

It is hoped this paper will demonstrate that in exactly the same way Congress may transform state railroads into federal railroads if, in its discretion, such action is necessary and proper in execution of its power to regulate commerce, and where any given railroad is already engaged in interstate commerce, it may be compelled to become a federal railroad corporation if Congress so enacts.

In the nature of the case, railroads created by state legislation cannot, as a matter of right, exercise their corporate powers outside of the territorial limits of the state creating them. In *Bank of Augusta v. Earle* (13 Peters, 519), the Supreme Court, speaking through Chief Justice Taney, says:

It is very true that a corporation can have no legal existence outside of the boundaries of the sovereignty by which it is created. It exists only in contemplation of law and by force of law; and where that law ceases to operate and is no longer obligatory, a corporation can have no existence. It must dwell in the place of its creation and cannot migrate to another sovereignty.

Nor can two or more states act in concert for the purpose of creating an interstate railroad. This was attempted about the middle of the last century by the states of Ohio and Indiana.

³ *McCulloch v. Maryland*, 4 Wheaton, 316.

Acting conjointly, these states made an honest effort to create a single railroad corporation to operate across their respective boundaries through their respective territories. When called upon to pass upon the question of whether one or two corporations was thus created, the Supreme Court, speaking through Chief Justice Taney in the case of *Ohio & Miss. Railroad Co. v. Wheeler*, (1st Black, 286), said:

It is true that a corporation by the name and style of the plaintiff appears to have been chartered by the States of Indiana and Ohio, clothed with the same capacities and powers and intended to accomplish the same objects, and it is spoken of in the laws of the states as one corporate body, exercising the same powers and fulfilling the same duties in both states. Yet, it has no legal existence in either state, except by the laws of the state. And neither state could confer on it a corporate existence in the other, nor add to nor diminish the powers to be there exercised. It may, indeed, be composed of and represent, under a corporate name, the same natural person. But the legal entity or person, which exists by force of law, can have no existence beyond the limits of the State or sovereignty which brings it into life and endues it with its faculties and powers.

It follows that the exercise of corporate functions of a state railroad corporation beyond the limits of the state bestowing them must, under our system, be based on comity between the states. While the intimate union of the states, as members of the same political family, no doubt created a greater degree of comity than exists between foreign nations, yet when the interest or policy of any state requires it to restrict the rule of comity, it has but to declare its will, and the further exercise of rights resting on comity ceases. Therefore, a corporate creature of one state doing business in another state is exercising a privilege and not a legal right.

From what has been said, it becomes apparent that it is entirely without the power of a state, or any combination of states, short of the Union as a whole, to confer upon a single railroad corporation the express power to engage in interstate commerce. To attempt to do so would be a contradiction in terms, for a state has no power, by virtue of its grant, to authorize a railroad incorporated by it to do business in another state; and yet the transaction of business between two states is the very essence of interstate commerce. The "power to regulate commerce" conferred by the Federal Constitution on Congress is the power to prescribe the rule by which "commerce" is to be governed. Like all other powers vested in Congress, it is complete in itself, may be exercised to its utmost

extent, and acknowledges no limitations other than those prescribed by the Constitution.

Any railroad system engaged in interstate commerce, unless already operating under a federal charter, must be made up of constituent companies created by the several states through which the system operates. By the combination and consolidation of these railroads into an interstate system of railroads, an element has entered into the structure of the system as a whole which is different from and in addition to anything derived from the respective charters of the constituent companies. That element is the *legal right* of interstate carriage as distinguished from the *privilege* of interstate commerce, resting on comity. Plenary authority over the system, thus becoming an integral part of interstate commerce, is thereby vested in the Congress of the United States. If Congress, in its wisdom, legislates that the constituent companies who owe allegiance to the several states creating them, should, in their combined functions forming an interstate system, become a national corporation, there would seem to be no legal obstacle to such relation being compelled.

This is true because such a combination and consolidation into an interstate system is impossible except by the voluntary assent and coöperation of the states and the several railroad corporations themselves. The states must expressly authorize such combinations and the companies must take the necessary corporate action to bring them about. During the early legal history of railroads in this country, the states were jealous of such combinations and granted power to enter them with reluctance. The benefits of such enlargement of facilities became so obvious that this attitude soon changed into acquiescence and encouragement, and general laws authorizing such combinations, *where competition was not interfered with*, became universal. More and more the public is now coming to see that competition between railroads is inherently wasteful and must be done away with. The results following the coöperation of the great systems through the War Board, and in spite of the anti-trust laws, have demonstrated how unwise our railroad legislation has been in the past.

The necessary consequence of combining two or more railroads created in different states into one operating machine is to convert the system into an instrumentality of interstate commerce. All

parties participating in such a change of status are charged with knowledge that the unlimited power vested in Congress to regulate commerce at once attaches to all the activities of this instrumentality which enter as elements into interstate commerce.

If Congress exercises this power to compel federal incorporation, neither the states creating the constituent companies and authorizing their combination into one system, nor the corporations themselves, can object on the ground that such an act (to be enforced only by forbidding the use of such property in interstate commerce except through the instrumentality of a federal charter), would not conform to the "due process of law" demanded by the Constitution. This is so because all parties have voluntarily placed themselves within the rightful exercise of this power, and the extent to which it is exercised is exclusively within the discretion of Congress.

We thus have the necessary conditions to action by Congress compelling interstate carriers to become national corporations, namely: (a) They are already engaged in interstate commerce (not as a matter of grace, but as a matter of legal right), and therefore within the jurisdiction of Congress, which becomes exclusive when exercised; (b) Congress is clothed with full discretion to determine whether or not its power to regulate makes it necessary and desirable that such instrumentalities should be nationalized. It seems to follow as a necessary consequence that with the power and the will to exercise it, there is a clear pathway to the point where Congress may compel interstate carriers to take out federal charters.

NATIONALIZING THE RAILROADS

The great practical difficulty which has hitherto confronted those who contemplated nationalizing the railroads has been a lack of well defined means for transforming and transferring the variegated contract obligations and liabilities of interstate carriers now outstanding, into obligations and liabilities of new corporations which the federal government might create. If, instead of creating an entirely new corporation, proper legislation be passed by Congress to convert existing railroad companies into federal railroad companies, these outstanding obligations and liabilities will not thereby be affected. The great tangle of contractual relations springing from leases, sub-leases, majority stock control, absolute

ownership, and all of the kaleidoscopic arrangements by which the constituent elements of the several interstate systems have been thrown together, would remain after nationalization as effectually in operation as before. The identity of the old corporations would not be changed; there would not be a state corporation and a federal corporation, but only the corporation originally created by the state with its allegiance transferred to the nation. Some may say that this would place the imprimatur of federal sanction upon outstanding securities which have been in some cases over-issued, and which over-issues are supposed in some quarters to be a great evil.

It is not certain that the issuance of these securities under the old, unrestricted and unregulated methods has been an evil. It is very doubtful whether the railroad systems of the United States could have procured the capital necessary for their construction except under the old speculative method of issuing their securities. It is not reasonable to expect a capitalist to invest his money on a low interest basis in a new enterprise, the success of which remains to be demonstrated. The history of railroad construction is, almost without exception, that the original builders of railroads lose their initial investments. These investments would have been withheld altogether but for the possibility of very large speculative profits. The development of these systems, with a few exceptions, has shown that the amount of these securities has not been excessive, and their value has at all times been regulated and controlled by the inexorable law of public demand. The price of such securities, fluctuating as it does, is controlled by a law more uniform and universal in its application than any legislative act could possibly be. That law would disturb the arbitrary legislative value of such securities before the ink could dry on the signature of the executive approving such an act. Neither the public nor the investor will suffer by leaving existing securities to the operation of the law of supply and demand which fixes the market price of everything.

It is not within the limits of this paper to go into much detail as to the functions of the proposed Federal Railroad Board. One complication frequently arising under our present system could be obviated under the new plan in such way as to remove one of the weaknesses in the ante-bellum system of management. When a given railroad fails to prove a financial success—let the reasons be

what they may—an embarrassing situation at once arises. The community it serves is vitally interested in its continued operation. Its public service cannot be abandoned. It cannot be liquidated and eliminated, as a bank is, without vitally affecting the section it traverses. Receivership and court operation ensue, and reorganization follows. This process is all too familiar in all sections, and is the underlying cause of the concentration of railroad holdings in the money centers of the East. It is up to the bondholders to reorganize, and they are thus compelled to take over the properties whether they want to or not.

Under no plan hitherto suggested is any satisfactory solution of the difficulty presented. The local community has practically no interest in these receivership proceedings, for it has come to believe that, whatever happens, the railroad must continue to operate and only in its continued operation are those interested who have no financial holdings in the company. If Congress would bestow upon the Federal Railroad Board power and discretion to authorize the abandonment and dismantling of a railroad which had proved a financial failure, and consequently not a public necessity, these people who had made investments upon the faith of the continued operation of the road would at once have a vital interest in its continuance, and from an attitude of indifference they would be converted into earnest advocates of such conservative management as would insure the continued service of the particular line in question. In such circumstances, it would become a matter of great concern to each community traversed by a railroad to see that its directorate and its executives were on the job of successful railroad operation, rather than engaged in the questionable practice of speculation in railroad exploitation, which, in some cases in the not distant past, have proved such a stench in the nostrils of the public. The same interest would have a healthful tendency to keep politics out of railroad management and, generally, would result in the public's keeping a very close watch on the situation as a whole.

THE STATUS OF STATE RAILROAD COMMISSIONS

Another matter of widespread interest is the relation of the several state railroad commissions to the situation which would be created if the plan herein proposed became operative. Notwith-

standing the fact that a large percentage of the several state railroad commissioners have committed themselves to the wisdom of federal incorporation of interstate carriers, thereby transferring exclusive jurisdiction to the federal authorities, a large number of the state commissioners naturally oppose such a course on the idea that it would leave them without sufficient functions to perform to justify the existence of their offices. It is submitted that this is not the case. The several state commissioners will have a broad and busy field of usefulness, after the entire jurisdiction over interstate carriers is transferred to the general government, in looking after the public utilities companies and the local regulation of railroads, which it is proposed to leave under the jurisdiction of the several states. A dispassionate consideration of the question by these very intelligent gentlemen now occupying positions on the several boards of state commissioners cannot fail to convince them of the soundness of this suggestion, and when the matter is properly understood and digested, all opposition to the change of regulation will no doubt disappear.

Until otherwise provided by Act of Congress, the several states should have jurisdiction over these national railroad corporations in the following particulars:

(a) In all suits against said corporations where legal venue exists and lawful service may be had.

(b) To make reasonable police regulations: 1st, as to separation of different races in the several stations and on local trains on a national railroad; 2d, as to the sanitary appliances and their uses while railroad cars are within the corporate limits of any municipality; and, 3d, as to the use and sale of intoxicating liquors on the premises or cars of such railroads.

(c) To regulate reasonably national railroads in the matter of grade crossings, stock-gaps and right-of-way fences.

(d) Any city having a population of not less than 150,000 according to the last preceding census of the United States should have jurisdiction, if thereto authorized by its charter, to regulate the motive power of national railroads for the movement of trains and cars within the corporate limits of such cities.

TAXES, RATES AND SECURITIES

Said nationalized railroad corporations should be uniformly taxed by the federal government a reasonable percentum of their gross receipts and their physical properties and securities exempted

from all other form of taxation. The taxes thus imposed should be apportioned as follows: one-fourth to the states, according to mileage in the several states; one-fourth to the several incorporated towns and cities into or through which the lines of said railroads may run, in proportion to their population as declared by the last preceding United States census; one-fourth to the several counties through which the lines of said railroad companies run, in proportion to the mileage thereof in each of said counties; and the remaining one-fourth covered into the Treasury of the United States—all expenses of collecting said taxes to be deducted before apportionment.

The fabric of freight rates is so pervasive and so intricate that the promulgation of rates by state commissions which are not in consonance with the interstate rates, filed with the Interstate Commerce Commission, have in the past greatly deranged its delicate pattern. This derangement became so acute as to culminate in what is known as the Shreveport Case,⁴ which is now being followed by the litigation in Texas, growing out of injunction issued by the three-judge District Court of the United States against the enforcement of the State Railroad Commission rates. This experience demonstrates that it is unwise for the regulation of railroad freight rates to be vested in more than one body. When the railroads have become national corporations, there would be no difficulty in transferring to the federal authorities the entire subject of freight rates, both interstate and intrastate. This could be done without the condition precedent that the intrastate rate affects the interstate rate, but on the much broader ground that the corporation itself is a federal instrumentality and as much subject to federal control of its charges as a national bank is to federal control of its interest rates, to the exclusion of state legislation on the subject.

With the latitude afforded the Federal Board of Control of railroad operations under the plan here proposed, there would be no difficulty in so adjusting rates as to allow greater compensation to some lines than to others. One of the greatest difficulties under the old régime was to obviate the injustice to the small line located in sparsely settled territory in having to do this service for the same rate of compensation as a road located in a densely populated section. The great trouble has been to fix a rate which would not starve the small poor line and at the same time create too much

⁴*Houston & Texas Central Ry. Co. v. U. S.* 234 U. S., 342.

revenue for the large rich line. There would be no legal objection to the Federal Railroad Board's fixing a basic rate with percentages of increase in various sections. For this purpose, a division of the country into regions or districts would be very useful.

It goes without saying that the Federal Railroad Board would have entire and exclusive control of the issuance of all new securities by the nationalized railroad companies.

POOLING OPERATIONS

Experience under the excellent work of the Federal War Board, which will be accentuated under the government operation for war purposes, has disclosed that great economies may be realized by pooling business under certain conditions. While pooling is a very difficult matter with segregated ownership of the several lines, it would be practicable to work out a plan whereby certain sections of the country, or the transportation of certain commodities, or the transportation of all commodities during certain seasons, might be pooled and the proceeds equitably distributed to the members of the pool so as to prevent wasted energy and increase the efficiency and working capacity of all parties concerned. While such a provision would *pro tanto* modify the provisions of the anti-trust laws, there seems little doubt but that public opinion will justify such modification by the time the necessity for it arrives. Many other functions of the Federal Railroad Board will occur to the thoughtful minds of men familiar with railroad matters.

When the Congress has transferred the allegiance of the interstate carriers from the several states to the federal government, and they thereby become its own creatures, many matters of regulation which are now without the power of Congress, will come within its jurisdiction, and experience will, from time to time, suggest many forms of regulation which hitherto have been neither legal nor practical; such, for instance, as limitation of dividends, creation of sinking funds, setting up reserves, and application of surplus to extensions and improvements.

The basic principles of the plan herein suggested thus appear to be the conversion of all interstate carriers into creatures of federal law and placing over them a competent board of control, not only in the matter of rates and regulatory rules such as have been within

the limitations of the Interstate Commerce Commission, but of the physical operations of the companies.

It will be conceded that under our form of government, the greatest danger to any successful plan of federal control of the operations of the railroads, whether through outright ownership or otherwise, is political influence and intermeddling. This danger is so obvious and so great in connection with government ownership, that it outweighs every economic argument which can be adduced in favor of government ownership. It is submitted that, under the plan herein proposed, this danger is reduced to the minimum by the creation of a department of the government for the operation of railroads and the appointment therein by the President of executive men of proven ability, with long terms of office and good salaries. Men of large caliber will be available, and it is fair to assume that pride in the successful discharge of their high duties will forestall any native proclivities towards political activities, which might otherwise develop.

It is hoped the suggestions of this paper may start discussion of the subject, and that by the time government operation under the present arrangement becomes no longer necessary, a satisfactory plan for restoring the railroads to the possession and operation of their rightful owners will have been provided. No plan can succeed that does not command the approval of public sentiment, and the promise and potency of this and all similar suggestions must spring from intelligent consideration and disinterested discussion.

THE NECESSITY FOR PUBLIC OWNERSHIP OF THE RAILWAYS

BY FREDERIC C. HOWE

Objections to the public ownership of the railways has for the most part been narrowly confined to the dangers of the spoils system, the possible activity of a great army of employes, the alleged incompetence of the government, its unwillingness to make improvements, and the necessity of keeping alive opportunities for individual initiative in this the greatest of all industrial activities of the nation.

But these allegations, even if true, are very secondary to the main question. The most important question before any people is the preservation of industrial and political liberty on the one hand, and the maintenance and development of the state on the other. And both of these things are all but impossible under private ownership of the railways.

POLITICAL INTEGRATION OF THE NATION

It is assumed that the political activities of the railroads have come to an end. "We are out of politics" is a frequent assertion of officials. The vulgar corruption of a few years ago may be in large part ended by the exposure and by the laws which have been passed; but a far more subtle, insidious control is maintained over the political life of the nation by the ramified activities of the railroads and the corporations identified with the railroads. It is no longer necessary to bribe men as it was a few years ago. An examination of the legislatures of our states shows a preponderatingly large number of railway attorneys within the membership. Judges of both federal and state courts are advanced from the railway legal departments to the bench. The constitutional conventions of New York, Ohio and Michigan recently held were filled with railway attorneys; and in New York and Michigan the constitutions which issued from their hands shielded and protected not only the railroads but the local public utility corporations. Chambers of commerce are ostensibly organizations of industry and trade. Yet they either cannot or dare not represent their membership. In most in-

stances they cannot. Instead of being organizations for the up-building of the community as they are in many foreign countries, they are too often interlaced with privileged interests that control their views on important public questions. The same is true of the press. It, too, is controlled and moulded by ownership, by advertisers and by the expenditure of millions of dollars for advertising. At the time of the threatened strike of the railway operatives a year ago it was stated that three million dollars was spent in a single day by the railways in presenting their claims.

In addition the wealth and talent of the nation is divorced from the nation. Attorneys, bankers, big business men are in constant conflict with the government. Railway officials fear regulation, taxation, measures for full crews and the like. A great staff of men is maintained for the presentation of claims before the Interstate Commerce Commission and for fighting off cases before the courts, while publicity agencies utilize every means for discrediting the government and bringing it into that distrust if not contempt which is largely the result of the innuendoes and activities of privileged interests.

Government ownership would end this conflict. It would free the talent of the nation. Men's patriotism would run free, unpoisoned by their private interests. Our city councils, legislatures and Congress would appeal to men of big talents who now are divorced from participation in politics because of the interests which they represent. The American people are not more unfit for self government than other peoples. This is not the trouble. The real trouble is that we have made it almost impossible for strong men and capable men to be identified with the state. The positions of power and wealth are to be had in corporations in constant conflict with the nation; they are monopoly privileges of various kinds which depend upon government favor. We must end this divorce. There is just as irrepressible a conflict between privilege and democracy as there was between slavery and freedom.

INDUSTRIAL INTEGRATION

What is true of the talent of America is equally true of our industrial life. Our circulatory system is owned by eighteen hundred quarreling, competing transportation agencies, each of which is in conflict with the others; and all of which are in conflict with the

producers and consumers. Transportation is run for profit. It should be the agency of service. And the great profits of the railroads are from anti-social service. To take but two from a score of examples. First, railroads are interested in long haul traffic. The community is interested in short haul traffic. More money is to be made in transporting goods across the continent than from a near-by point. Every traffic employe knows this fact. Fifty years ago food and cattle were produced for local markets, as is the case in other countries. Today the food of cities like New York and Philadelphia comes from California, Florida and distant points. Farmers in New York State cannot get transportation service. They are driven out of business. They abandon their farms. Yet while these farmers are clamorous for cars, food trains come in with the regularity of express service from Oregon and California. The same is true of cattle. At one time every farmer raised cattle, sheep and hogs. The transportation of meat was taken over by the great packers of Chicago, Kansas City and Omaha. They control the transportation of food through the ownership of refrigerator cars, and they, in coöperation with the railroads, have destroyed the raising of cattle all over the country. They compel cattle to be hauled from distant California to Chicago to be killed. It is then hauled back to California to be consumed. The farmers of the northwest ship their grain to Minneapolis to be milled. It is then shipped back to the northwest to be consumed. The same is true of almost every other industry. A large part of the traffic of the country is sent round about Robin Hood's barn when it should be sent by the most direct route possible. The cost of transportation is increased, industry is destroyed, and the whole industrial, social and agricultural life of the country is on a false basis.

Second, the classifications of railway freight are for the purpose of making the maximum profit. There are hundreds of thousands of classifications. On some days a hundred thousand or more changes are filed with the Interstate Commerce Commission. It would take a week's work of a corps of men just to keep up with these changes. In European countries where government ownership prevails classifications are simple. They are printed in a little rate book that every business man carries in his pocket. They can be understood by anyone. A man knows instantly what his freight charge will be, just as he knows the cost of a telephone call.

Through these classifications discriminations and advantages are given one set of shippers at the expense of another. The old kind of discrimination is gone; but the new kind is just as harmful, and possibly just as universal as was the old. Special routings are given. Differentials, switching advantages, terminal advantages, etc., are allowed. No shipper really knows whether he is on an even keel with his competitor or not.

These are but indicative of a score of conditions which prevail; conditions which must prevail so long as transportation is an agency of profit rather than of service. The sole aim of railroad administration is to make as good a showing as possible. And railway operators are not to be blamed for this. They look upon their industry just as does every other business man. But the state is interested in rendering maximum service to the largest number of people at the minimum cost. And this is only possible through government ownership.

We can get some vision of the social use of railroads by the methods employed in Germany, Australia, Switzerland, Denmark and other states where the conscious purpose of railroad administration is at all times the upbuilding of the country. Denmark utilizes her railroads for agriculture; for the placing of her goods in England and Germany in the quickest possible time at the lowest possible rates. The same is true of Belgium, from which country special trains are run to Zeebrugge, where they connect with government owned steamers for London and to Paris. In Australia the railroads are exclusively a state agency. They aid cattlemen, farmers, dairymen. Each station agent is a government employe. He receives the farmers' products. He sends them to a government terminal or to a public slaughter-house. They are shipped even to England under government control. The farmer gets all that he produces. He is free from discriminations, and there are no middlemen whatever between him and his consumer.

The industrial development of Germany is largely a railroad development. In Germany railroads are run for industry. The chambers of commerce and agricultural associations form a part of the administration. Special rates are given ship-builders to up-build the merchant marine. Similar rates are given on raw materials. Industries and towns are built up in this way; while the great export trade of Germany is partly traceable to the aids and

special rates made on export products. This is but indicative of the thousands of devices that can be developed for upbuilding the state when the transportation agencies are in public hands.

INTEGRATION OF PHYSICAL EQUIPMENT

Under private ownership there are several hundred railroads built as a separate entity and operated as such. Each railroad has its own terminals, passenger stations, yards. One terminal may be filled with cars awaiting freight; a near-by terminal may be filled with freight clamorous for cars. Empty trains on one railroad pass other empty trains on another railroad going in the opposite direction in search of cargoes. There is terrible waste: waste like that of having a half dozen water plants in the same city; for each railroad has to have terminals, freight houses, passenger stations. It has to have docks, lighterage and warehouses. It has to be equipped for the maximum load.

It is impossible to mobilize all these agencies with hundreds of different railroads maintaining their separate existence. But two railroads enter the city of New York. The New York Central is the only railroad having a freight terminal in Manhattan and it uses every possible means to keep other railroads out. A half dozen other systems maintain separate terminals on the Jersey shore. They ought to be united into a single great terminal. And they ought all to use the Pennsylvania and New York Central facilities in New York City. In Chicago there are a score of terminals; a half dozen great passenger stations. There is tremendous wastage in real estate and in investment, and far greater wastage to the industrial life of the city.

In those countries where the railroads are owned by the government there is usually but one union passenger terminal. The passenger stations are commanding structures. They are the portals of the city. All railway lines enter there. This means great convenience to the public and great economy in operation.

Even greater wastage is involved in the suppression of the water transportation facilities of America. The railroads own the water fronts of our cities. They will not develop them or permit them to be developed because water transportation is cheaper than rail transportation. It costs one-seventh as much to carry freight by water as it does by rail. As a consequence coast-wise shipping

is discouraged or destroyed. Our rivers carry less freight than they did a quarter of a century ago. Canals have been bought up, or through political control of the state they have been put out of business. The Great Lakes from Duluth to Buffalo, the greatest water-way in the world, is little more than a private possession of the railroads and the steel trust. The government has spent tens of millions of dollars on harbors, almost every one of which is under the control of the railroads and the iron and steel industries. A generation ago the Great Lakes were covered with independent fleets. They have been put out of business. Shipping has decreased. This water-way is almost a private possession; while great cities are unable to make use of the water-fronts for the upbuilding of industry or transportation. The State of New York has spent tens of millions of dollars on the Erie Canal. It carries less tonnage than it did a quarter of a century ago. It should be part of a continuous water transportation system from Duluth to the seaboard.

Only the government can work out an integration of rail and water transportation as has been done in Germany and Belgium, in which countries heavy bulk traffic is carried by water, the railroads being reserved for other freight. Immense economies can be made in transportation, and great savings in structural arrangements and motive power if the rivers, water-ways and seas are permitted to perform the service for which they are naturally intended. This is only possible to the government itself.

Similar colossal economies can be brought about through the substitution of hydro-electric power for coal. There is two million horse power going to waste in New York State alone. There are rivers that could be harnessed. Even the Mississippi could be made to operate our railroads; while the Rocky Mountains and Sierra Nevadas would provide sufficient power to free the railroads of the west from dependence upon coal. A great hydro-electric development organized in a comprehensive way would provide power and light for industry, for our cities, even for the farmers. Such a program has been carried out in Switzerland, in Bavaria, in the province of Ontario, in which states the white coal is supplanting the black coal, with immense savings to industry.

It is probable that the consolidation of the railroads, the unification of terminals, the utilization of motive power and cars to

their capacity would involve savings of hundreds of millions of dollars in transportation cost. Similar economies would be made through the substitution of water for rail transport. This would amount to tens of millions annually, while the substitution of hydro-electric power for coal would mean great economies in transportation costs and a saving of our fuel as well.

INTEGRATION OF OPERATION

The railroads of the country should be organized like an army. There should not be hundreds of different railways, each one an entity by itself. The 240,000 miles should be organized as a unit. It is far easier to mobilize railroad service where needed than it is to mobilize an army. If the cars and motive power of the entire country were directed from a single point as are the Pullman cars, the express service, the refrigerator cars, the fast freight lines, there would be adequate facilities for the needs of the country, and a great speeding up in their use as well.

Similar economies would be made in the accounting and clerical operations. Today millions of different rates and classifications are made, which require endless bookkeeping. They involve confusion for railroads and shippers. This could be done away with by unification of transportation and the simplification of classifications.

There are tens of thousands of agents who solicit freight for competing lines. There are thousands of other men engaged in attending to the details of inter-railway relations. In every large city there are a score of competing ticket offices and competing representatives of distant freight lines, all of which cost has to be maintained by the public. Every railroad maintains a highly paid legal staff. The best legal talent of the country is identified with the railroads; and a large part of their effort is devoted to controversies with the Interstate Commerce Commission, with state railroad commissions, with controlling local politics, with looking after the political side of railroading. This involves a waste of millions of dollars. In addition, each railroad maintains its corps of highly paid officials, many of whose salaries equal that paid the President of the United States. Many of these officials are appointed through favor. These high salaried officials could be largely dispensed with

if the financial motive of railroading were ended and the transportation agencies were dedicated to transportation alone.¹

Millions of dollars more are spent each year in publicity, on advertising, on making public opinion. Immense sums are paid for the stimulation of traffic over particular lines. The losses to the public from wasteful competition and from political activities are colossal.

ECONOMIES

But these economies are relatively small in comparison with the great savings that would come from public ownership. In the first place government securities bear but 4 per cent or 5 per cent interest. In peace times government securities are issued at from 2½ per cent to 3 per cent. Railroad managers insist upon a very much higher return. If 2 per cent were saved upon the securities of the railroads, it would amount to \$400,000,000 a year, or nearly twice as much as the total budget of the Post Office Department.

In addition the railways are taking immense sums out of earnings every year and investing them in the property. This is the way betterments, improvements and extensions are made. Hundreds of millions of dollars are collected from the public each year and converted into capitalization, upon which the public is then asked to pay interest and dividends. It is probably true that billions of dollars of the present capitalization of the railroads has been taken from the people in excessive charges and converted into capital account.

Along with this railroads are capitalizing and insisting upon payment of their increasing land values. Land connected with the city terminals and rights of way is increasing rapidly in value. Agricultural land doubled in value between 1900 and 1910. City land increases with about the same rapidity. A single railroad in one of the southern states in its hearing before the Valuation Committee of the Interstate Commerce Commission insisted that it be allowed \$880,000 for land that had cost but \$71,000.

It is probable that several billion dollars have been added to the capitalization of the railroads from the unearned increment of land

¹ The salaries paid administrative officials by the railways amounts to \$340,000,000 a year. As to how much of this is for salaries of men engaged in the actual operation of the properties is not discussed.

and rights of way held by the railroads. This is a social value. It is created by the community. It is traceable to the growth of population, to industry, to the increasing congestion of the country. Upon this valuation, which is being increased at the rate of hundreds of millions every year, dividends are demanded, while the demand is being made that the people shall pay for a social value which they themselves have created.

All of these increments in value could be saved to the community under government ownership. Then betterments made out of earnings would be owned by those who made them; while increasing land values would remain community values, which they are in effect.

FREE THE RESOURCES OF AMERICA

The report of the Pujo Investigating Committee made in 1913 showed a remarkable pyramiding of banking, transportation and industry. Practically all of the great transportation systems of America were under the control of four great banking syndicates located in New York. Railroadings has become an agency of finance rather than of industry. Railroads are operated from New York. They are no longer operated for the promotion of the industrial life of the state. Moreover, and this is the gravest possible menace to industrial freedom, the same group that owns and controls the railroads owns and controls the industrial life of America. Competing industries have to compete against concerns which are interlocked with transportation. Even though it should be true that the grosser violations of a generation ago are ended, there still remain endless privileges, preferences, discriminations and rebates which make it difficult for new industries to operate on equal terms with the great combinations of capital. Moreover, the railroads place in the hands of the bankers control of upwards of \$4,000,000,000 annually. The concentration of banking capital is largely traceable to railway earnings, and this capital in turn is used by the great banks for the maintenance of their monopolies.

Industry in America must be free. It must be free from the menace of railroad discriminations and of credit discriminations as well. The talent of the country must be free from fear. It must be released so that it may venture freely into new industries, new mines and new ventures of every sort. For freedom is of the es-

sence of American life. And we cannot have industrial freedom under privately owned transportation systems.

It is probably no exaggeration to assume that the productive capacity of America would be increased by billions of dollars annually if it were free from the present inadequacies of transportation, if it were assured a free and constant outlet, and if the credit of America were free to encourage a competing industry rather than repress it. Public ownership is necessary to free banking. It is necessary to free the ingenuity, talent and labor of America as well. Today mines are closed two or three days a week because of lack of cars. Industry all over the country is strangled because of its inability to transport its output. Automobiles by the thousands are driven to their destination on their own power; millions of men are unable to work full time; while invested capital is reduced to part time employment because of the discriminations and inadequacy of the transportation agencies of the country whose necessities have grown beyond the possibilities of private control.

THE EXPERIENCES OF OTHER COUNTRIES

The experience of America is the experience of other countries. Germany suffered from the same difficulties that confront us, as did Italy and Switzerland. These countries found it necessary to take over their railroads in order that the life of the nation should move freely and fully, and wherever the railroads have been taken over the industrial life of the nation has been greatly aided by the many services which the government was able to render. Just as those agencies that are owned by the cities are operated for service and are integrated into the life of the community, so the transportation agencies become a very different thing when the motive of operation is one of service rather than of private profit. The greatest reason of all for public ownership is the change in the motive of railroad transportation.

STATE REGULATION OF THE SECURITIES OF RAILROADS AND PUBLIC SERVICE COMPANIES¹

BY MARY L. BARRON, PH.D.

POWERS AND PROCEDURE OF PUBLIC SERVICE COMMISSIONS IN RELATION TO SECURITY ISSUES OF PUBLIC SERVICE CORPORATIONS

State control of the security issues of public service corporations has grown by slow stages from an almost complete absence of any checks in the era of special charters to the recent concentration, in a few states, of absolute power in the hands of a commission. The present state laws governing a public utility's security issues are to be found in a few special charter acts, in general statutes, and in special public service commission acts. As the latter represents the most complete method of supervision, particular emphasis is placed on the analysis of this group.

In answer to a deeply felt need of an administrative body to enforce the general laws in regard to railroads and public utility corporations, public service commissions have become so widely established that in 1917 there is only one state which has no kind of public utility commission—Delaware. Twenty-four states, however, have failed to confer on their commissions power to regulate the issuance of securities.² Commission control of securities is, therefore, absent from twenty-five states.

All degrees of power from publicity to absolute control have

¹ No secondary material has been used in the preparation of this article. The Public Service Commission Act (summarized in Table I) and the codified laws (Table II) of each state have been analyzed to discover in what manner the security issues of railroads and of public service companies have been subjected to regulation. Since the tables have been arranged so that the exact citation for any subject is easily found, footnote references have been omitted when a statute is analyzed in the text.

² Alabama, Arkansas, Colorado, Connecticut, Florida, Idaho, Iowa, Kentucky, Louisiana, Minnesota, Mississippi, Montana, Nevada, New Mexico, North Carolina, North Dakota, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Utah, Washington, Wyoming.

been conferred over securities on the remaining commissions. Rhode Island's one-paragraph provision covers only the stock, and not the bond, issues of street railways. The powers and the work of this commission in the matter of securities are so slight as to amount to non-regulation. The Pennsylvania and Virginia commissions are of the pure publicity type, their work consisting of the filing of notices of increases of securities. There are ten commissions that are limited to inquiring into the truth of the statements in the corporation's application for approval.³ Texas has a very stringent law, but one that is enforced not so much through the powers conferred directly on the commission as through the severity of the penalties imposed upon the corporation for any infringement.

Some initiative is permitted all the other commissions by statute. Besides determining the truth of the statements in the application, the commissions of Massachusetts, New Hampshire and New York have power to specify the purposes and to determine the amount of securities reasonably necessary. The commissions of Ohio and Wisconsin have the additional power to decide the character of the securities and to define the terms of issue.

Four commissions have complete and unrestricted power over security issues, that of Vermont deriving its authority from a general provision to prevent overcapitalization, and those of Arizona, California and Illinois from detailed provisions in special public service commission acts.

Less than 20 per cent of the public service commissions have any discretionary powers on questions of capitalization. So incomplete are most of the laws that many commissions, though not permitted by law, have imposed conditions in order to make their control effective in any degree. Commission control over the capitalization of public service corporations, and particularly of railroads, is neither universal nor uniform.

The public commission acts provide for the enforcement of commission control over the security issues of public service corporations and of railroads by prescribing the proceedings necessary to validate an issue.

Previous permission of the commission, evidenced by a certificate of authority, must be had in eighteen states for all securities

³ District of Columbia, Georgia, Indiana, Kansas, Maine, Maryland, Michigan, Missouri, Nebraska, New Jersey.

TABLE I.—ANALYSIS OF THE PROVISIONS OF STATE LAWS RELATIVE TO THE REGULATION OF SECURITY ISSUES BY PUBLIC SERVICE COMMISSIONS

State	Statute conferring power over security issues	Power to issue securities a special privilege	Previous permission required	Previous application necessary	Previous investigation	Recording the certificate required	Accounting for the proceeds required	Penalties	Approval as a guarantee
Arizona	1912, c. 90, sec. 52	52a	52b	..	52b	..	52c	52 d, e, f	52g
California	1912, c. 14, sec. 52	52a	52b	..	52b	74	52c	52 d, e, f	52g
District of Columbia	1912, sec. 8	72	72	..	..	..	..	75-80	..
Georgia	1912, sec. 8	..	8	..	..	..	..	12	..
Illinois	1912, 90-31	20	21	91	21	..	21	23, 24, 25	26
Indiana	1912, 88-03	24a	25	25	25	34	..	26	26
Kansas	1911, 24-27, 34-38	..	25	25	35	36	..	28	..
Maine	1911, 85-28	..	27	..	27	..	..	16	..
Massachusetts	1910, 180, sec. 27	..	16	16	..	..	..	28	..
Maryland	1912, 1784, sec. 15, 16	..	..	1	..	..	..	16	..
Michigan	1911, 1	..	..	..	..	58.1	59.1	2, 3	59.5
Minnesota	1912, 64-58	54	57	..	..	..	..	59.2-4	..
Missouri	1909, 1-3	..	1	..	..	..	..	2, 3	..
Nebraska	1912, 1-3	..	14a	14a	..	..	..	..	..
New Hampshire	1911, 14	..	18a	..	..	..	..	..	..
New Jersey	1911, 18-19	..	55	..	55	..	..	56	..
New York	1912, 55-56	..	58	57	58	..	..	60	..
Ohio	1911, 66-63	..	..	4a, b	..	..	..	..	..
Pennsylvania	1913, 4	..	4	..	..	..	..	..	4d
Rhode Island	1909, c. 216, 4	..	..	..	..	..	..	..	..
Texas	1895, s. 4584, s-m	4584, a	4584, f-h	4584, f, g	..	..	..	4584 i, k, l	4584 m
Vermont	1908, sec. 16	..	16	16	16	..	..	..	..
Virginia	Constitution 1902, 167	..	..	167	..	..	..	..	..
Wisconsin	1913, 1753, 1-22	1753, 2	1753, 9.1	1753, 9.4, 6, 8	1753, 9.2	..	1753, 13	1753, 17, 18, 19	..

All references are to the public utility act of the respective states, passed in the year indicated.

1 Does not apply to steam railroads.

2 Applies only to street railroads.

issued by a railroad company.⁴ The public utility corporations of the same states, with the exception of Texas, are subject to the same provision, and also those of the District of Columbia and Indiana. Rhode Island requires such authority for the stock issues of street railways. The Pennsylvania commission has no power on its own initiative to certify to an issue, but must do so if the corporation applies for a certificate of valuation. In Texas, the certificate is in the form of a notice to the Secretary of State that the law has been complied with, especially that the particular issue does not exceed the value of the property covered by it. The certificate of the other commissions states the amount, purposes and character of the issue; that the amount is not in excess of the amount required for the specified purposes; and that no part of the amount, except when permitted in reference to bonds, is chargeable to operating expense or income. When the commission has power to impose conditions, these are also set forth in the certificate.

A necessary prerequisite to the issue of a certificate is an application by the corporation for approval. The Texas law does not require a previous application, but the rules of the commission call for it in all cases. The laws of several states contain only a very general clause, demanding a written application to be made,⁵ while others prescribe the contents of the application.⁶ The application contains information on the same subjects to which the commissions must certify in their certificate of authority, namely, the amount, character and purposes of the issue, the terms of the issue, and a description and estimated value of any property or services that are made a basis of the issues.

In two states, Pennsylvania and Virginia, the filing of a similar statement, called a Certificate of Notification in Pennsylvania, meets all the requirements of the law, and the corporation is subject to no further control in matters of capitalization. The duty of the commissions of these states is fulfilled by placing this statement on public file.

Previous investigation of the statements in the application is definitely provided for in the statutes of many states, and in the

⁴ Arizona, California, Georgia, Illinois, Kansas, Maine, Maryland, Massachusetts, Michigan, Missouri, Nebraska, New Hampshire, New Jersey, New York, Ohio, Texas, Vermont, Wisconsin.

⁵ Georgia, Maine, Massachusetts, Michigan, New Hampshire, Vermont.

⁶ Indiana, Kansas, Ohio, Wisconsin.

case of almost every application the commission conducts an investigation.⁷ The commission must hold a public hearing, and is empowered to make additional inquiry, to make a valuation of the property of the corporation, and to examine such witnesses, books, documents and contracts, and to require the filing of such data as it may deem of assistance in reaching a determination.

If the commission decides to permit an issue of securities, its certificate must, in several states⁸ be recorded on the books of the company before securities may be issued. In other states, the certificate must be filed with the Secretary of State.⁹

To insure the proper disposition of the proceeds of authorized issues, various provisions are found in the state statutes. Wisconsin may require the utility to perform any act necessary to carry out the provisions of the law. Some states permit their commissions to establish any rules or regulations in their judgment reasonable and necessary to prevent the disposition of the proceeds for any purposes except those designated in the order.¹⁰ A detailed accounting of the proceeds is called for by some laws,¹¹ and, in practice, by all commissions.

Failure to observe any of the provisions in the act is punishable by *penalties* that operate against the security issued, the corporation, and the officers and employees. The laws of nine states declare all securities void, which do not conform to the law.¹² There is a conflict of opinion as to the power of the commission to validate such illegal issues. Texas,¹³ California¹⁴ and New Hampshire¹⁵ require new applications, but Nebraska¹⁶ and Indiana¹⁷ validate the issue.

⁷ Arizona, California, Georgia, Illinois, Maine, Maryland, Michigan, Missouri, Nebraska, New Hampshire, New York, Ohio, Vermont, Wisconsin, and Pennsylvania in case of a Certificate of Valuation.

⁸ District of Columbia, Kansas, Missouri, Wisconsin.

⁹ Texas, New Hampshire, Massachusetts.

¹⁰ Arizona, California, Illinois, Missouri, Wisconsin.

¹¹ Arizona, California, Illinois, Missouri.

¹² Arizona, California, District of Columbia, Illinois, Kansas, Maine, Ohio, Texas and Wisconsin.

¹³ Public Utility Reports Annotated (hereafter referred to as P. U. R.), 1915, E531.

¹⁴ *Id.* A643, 1071.

¹⁵ *Id.* E931.

¹⁶ *Id.* C24.

¹⁷ *Id.* B55.

If there is no need to change the terms of the issue, a validating order would seem sufficient, without compelling the corporation to recall the unauthorized securities and issue an identical new series, with only the authority of the commission added. The penalty imposed on the utility is usually a fine, ranging from \$500 to \$20,000. The agent may be fined \$500 to \$10,000 or imprisoned on a misdemeanor charge in some states, on a felony charge in others, for a term of one to fifteen years, and, in Texas, is personally responsible to the creditors for the full amount of any damage sustained.

The administrative control of security issues is provided for in state statutes by requiring previous permission of a public service commission, which is granted upon application and after investigation. This permission must be recorded in some states upon the books of the corporation or with the Secretary of State. The proceeds from authorized issues must be strictly accounted for. For any failure to obey the law severe penalties are imposed, the least of which is sufficient impetus to a close observance of the provisions of the statutes.

Compelled in twenty-three states to submit to some measure of supervision by a public commission, the public service corporations and railroads are served with a notice in almost all states that the approval of the commission carries no guarantee.¹⁸ The orders of the commission often contain the further condition that such authority shall not be binding upon the commission or any other tribunal as a finding of the value of the applicant's property¹⁹ in any rate or other proceeding. These emphatic declarations that the commission's approval carries no guarantee of value or dividends would seem to uphold the frequently repeated assertion that securities have no relation to rates. In practice, however, the same commissions have considered the return on investment which a particular rate will yield before making any change.²⁰ Inversely the ability of a company to meet interest charges has been the justification for authority to issue securities.²¹

In rate valuation proceedings, the security issues almost invariably have weight, even in states where there is no power granted

¹⁸ Arizona, California, Illinois, Indiana, Missouri, Pennsylvania, Texas.

¹⁹ P. U. R. 1915, B1072, A557, F795; *id.* 1916, B583, A514.

²⁰ P. U. R. 1916, A227, A594, C281, C1020, D25.

²¹ *Id.* 1915, A744, 749.

to a commission over securities.²² The general assurances that securities will be considered have been translated into positive action by many commissions, rates being maintained or even raised in order to give a favorable return on the securities.²³ The Massachusetts Public Service Commission has taken the most definite stand in this matter, holding that capital honestly and prudently invested must be taken as a controlling factor in fixing a basis for fair rates,²⁴ and that the approval of the commission is conclusive evidence that the issue represents legitimate investment.²⁵

The consequence of a change of rates upon the market value of securities should be carefully considered by all commissions. If strict observance is required of the provisions that securities are to be issued only in amounts necessary for proper purposes, and that full value in assets is turned into the corporation, the commissions will best guard the public's interests by being generous and fair in rate questions. The ordinary risks of business, however, should not be insured against because of commission approval of securities except that rates should always be sufficient to provide for obsolescence as well as depreciation. The best relationship between the corporation and the public is maintained when a fair return is permitted upon a fair investment, without removing the spur of responsibility for conservative management from the officers of the corporation.

STATE STATUTORY LIMITATIONS ON THE ISSUE OF SECURITIES

The *security issues* of public service corporations that are subject to control are *defined* to be stocks, stock certificates, bonds, notes, trust certificates, or other evidences of indebtedness, payable at more than twelve months after date. No one of the public service acts enters into more detail. The lack of exact definition has been a marked deficiency of all the laws. What constitutes an issuance of such securities was also left for the commissions to determine. As interpreted in the various states, control has been extended far beyond the original issue to bona fide purchasers, or

²² P. U. R. 1916, D976, 1915, A618.

²³ *Id.* 1916, A349, 276, 506; 1917, A255.

²⁴ *Id.* 1915, B362; 1917, A331.

²⁵ *Id.* 1915, E370, F264.

TABLE II.—ANALYSIS OF PROVISIONS OF STATE STATUTES CONCERNING REGULATION OF THE ISSUE OF RAILROAD SECURITIES

State	Code ¹	Purposes of issue defined ²	Payment required to be in money, property, labor, or services	Par of stocks defined	Selling price defined	Provisions concerning scrip dividends	Ratio of bonds to stocks	Liability of stockholders	Corporate power to increase or decrease stock defined	Right granted to issue	
										Preferred stock	Bonds
Alabama	1907	..	3467	....	....	810	814	3468	3480	3479	....
Alaska	1913	52b	811	....	52b ³	....	52b ³	811	815	....	....
Arizona	1913	52b	....	3133	....	....	6686	2100	2102	....	2150
Arkansas	1904	52b	359	6721	....	....	6686	332	6686	1905, a, 330	6686
California	1915	..	860	....	52b ³	....	52b ³	332	332	290, 6	456
Colorado	1911	..	883	....	....	1915, 35	1915, 115	900	883	1915, 13	5415
Delaware	1914	8	2653	2802	....	....	1915, 26	2681	1915, 26	1915, 13	1915, 115
Florida	1911	..	1913, 8, 100	....	....	....	1909, 8100	2583	2673	....	2803
Georgia	1914	31	8756	....	id.	....	....	id.	id.	id.	2895
Idaho	1913	..	....	....	....	8756	....	id.	id.	191, c, 11g	191, c, 11g
Illinois	1914	..	1641b	5084	1641b	....	....	8751	8749	5182	8754
Indiana	1913	25	....	....	....	....	....	5323	5319	2044	5245
Iowa	1915	25	....	....	....	....	....	1641b	....	2120	2328
Kansas	1915	25	568	....	....	....	2183	547	543	564	771
Kentucky	1897	35	C, 266	....	....	....	....	143	C, 267	....	....
Louisiana	1903	35	C, 47, 87	c, 47, 33	c, 51, 32	37 ¹	c, 55, 9	e, 47, 86	c, 51, 5, 19	c, 47	c, 52, 32
Maine	1910	27	a, 23, 35	a, 23, 264	....	....	a, 23, 276	....	a, 23, 267	a, 23, 24	a, 23, 267
Maryland	1908	15	6691	....	6687	6691	c, 630, 1	....	6616	1915, c, 209	6893
Massachusetts	1913	1	6576	6576	6131	58, 2 ²	6223, 21	C, xii, 4	6227	6229	6323
Michigan	1913	..	4102	6131	6138	....	....	C, i, 3	4083	4084	4084
Minnesota	1906	57	962	4076	....	....	1909, 2681	985	983	1050	1035
Mississippi	1906	57	2894	....	....	68	3894	C, ix, 4	3893	3899	....
Missouri	1907	1	1155, 6	3512	....	....	3526	C, ix, 4	551	....	572
Montana	1913	1	1913, c, 15	....	c, 149, 9	....	c, 150, 4	c, 1135, 6	1135	1114	8326
Nebraska	1912	14a	940	....	....	....	....	c, 150, 8	c, 150, 17	....	....
Nevada	1901	..	....	....	....	....	....	p, 4221, 5	697	4221, 5	4221, 6
New Hampshire	1910	..	....	....	....	....	4697	....	914	1910, c, 481	4697
New Jersey	1915	55	1159	....	....	....	....	....	1159	1159	2567
New Mexico	1913	..	4628	....	....	61 ¹	4543	2556	2555	4558	4613
New York	1905	..	....	....	....	....	8793-4	8686	8815	8667	8793
North Carolina	1913	56	....	....	....	....	1266	1263	1381	....	1383
North Dakota	1910	..	....	....	....	....	338	6696	6701	....	....
Ohio	1910	..	6696	....	....	....	1887, 94	1814, 90	1893, 94	1887, 94	1887, 94
Oklahoma	1910	..	1887, 94	1949, 82	1887, 94	....	c, 214, 12	c, 214, 1, 11	c, 212, 7-8	....	....
Oregon	1910	..	....	....	....	....	436	3110	2883	....	....
Pennsylvania	1909	..	....	....	....	....	....	441	486	....	489
Rhode Island	1912	..	2880	....	2887	....	1198	6458	1915, c, 108	....	2049, 2054
South Carolina	1913	..	443	2052	6469	....	....	331	338	....	6544
South Dakota	1896	..	....	....	....	....	4313	4308	4348	4371	4382
Tennessee	1911	..	6469	....	6469	....	....	3698	3704	....	1105
Texas	1908	..	316	4335	4376	....	....	3697	3704	2840	3699
Utah	1906	..	1910, 143	1106	1124	....	....	2948	2944	....	2949, 2989
Vermont	1916	..	1108	....	....	....	....	3692	3697	3684	4194
Virginia	1910	..	2857	2848	2858	....	....	3698	3697	....	....
Washington	1910	..	1753	....	....	....	....	3698	3697	....	....
West Virginia	1906	..	....	....	....	....	....	3698	3697	....	....
Wisconsin	1911	1753-5	3689	....	....	....	....	3692	3697	....	....
Wyoming	1910	..	....	....	....	....	....	3692	3697	....	....

¹ All references are to sections in the codes, revised statutes, or compiled laws of each state of the date given in this column, unless otherwise indicated by 1. A different date, when the reference is to the general statutes for that year. 2. "C." refers to the constitution. 3. "c." refers to the chapter, and "s." to the article in the law.

for retention in the treasury to pledged²⁶ and reissued²⁷ securities and to issues to effect a reorganization²⁸ or consolidation.²⁹

All securities issued for periods of less than twelve months are *exempt from regulation*. The Pennsylvania commission may, in its discretion, extend to such securities the provisions that require a certificate of notification to be filed. Wisconsin limits such issues to those that are made for money, requiring the consent of the commission if issued for property or services. Michigan permits an original issue for twenty-four months without consent of the commission. The other states place no restraints upon the issue of such securities. In some states the refunding of such securities, if in the form of an issue running for more than twelve months, must not be carried out without the consent of the commission.³⁰ In other states, the refunding in whole or in part by any issue of securities of whatever term or character requires the consent of the commission.³¹ Illinois further forbids their renewal from time to time, without consent, for an aggregate period of longer than two years. All other states require consent for any refunding issue that is to run for longer than twelve months.

The interstate character of the corporation or of a particular issue may also have the effect of a partial exemption. Some state laws confine supervision to domestic corporations,³² in which case no part of the securities of a foreign corporation need to be approved. Other states apply the law to all corporations transacting business within the state.³³ The Georgia act could receive the last interpretation, but the commission has refused to take jurisdiction over the stock issues of foreign corporations, or over the bond issues of a corporation engaged in interstate commerce.³⁴

The location of the property that is the basis for the issue is

²⁶ P. U. R. 1916, A42.

²⁷ *Id.* 1916, C1178.

²⁸ District of Columbia, New York, Ohio, Wisconsin, Illinois, Texas.

²⁹ All Public Service Acts, except those of Georgia, Michigan, Texas and Vermont, specifically provide for control over consolidations of railroads or utilities

³⁰ Georgia, Indiana, Maryland, Michigan, Missouri, Nebraska, New York, Ohio.

³¹ Arizona, California, Illinois.

³² Maine, Maryland, Nebraska, New York, Vermont.

³³ District of Columbia, Kansas, Michigan, New Hampshire, Ohio, Wisconsin.

³⁴ National Association of Railroad Commissioners, Proceedings, v. 25, p. 172.

more commonly made the measure for jurisdiction. The acts of Arizona, California and Missouri and the commission ruling of Illinois apply the act to all issues that are based upon property within the state. The Arizona commission interpreted this provision so broadly that it claimed jurisdiction over the bond issue of a foreign corporation, although there was no lien on any property within the state and none of the proceeds were to be spent within the state, because it was not clear that in the event of a foreclosure a deficiency judgment might not be taken against Arizona property.²⁸

If the proceeds are to be spent without the state, many commissions lose control. The acts of Massachusetts and of New Hampshire exempt such part of an issue as represents expenditures outside the state. The Massachusetts commission, however, does pass upon all issues by domestic corporations and must be notified of the details of the entire issue by a foreign corporation, if any part of the proceeds are to be spent in Massachusetts. The Ohio commission grants, but does not require, its approval if expenditures are to be made without the state. The Maryland commission claimed full jurisdiction over all issues of securities by domestic corporations, but the courts held that it had no control over securities the proceeds of which were to be spent outside the state.²⁹ With these exceptions, the laws governing the issuance of securities apply to every form of issue, including pledge, whether by a new, existing, reorganized, or consolidated company, and whether for property, privileges, or services.

There are various limitations as to the kind of security that may be issued under certain circumstances. Those states which permit the issue of securities for operating expenses and replacement require them to be in the form of bonds or notes. Refunding issues must be in the same form as the securities they are retiring, unless a special order is obtained permitting a change.

The most widespread limitation on the class of security to be issued is that which defines the proper *proportion* to be maintained *between bonds and stocks*. There is no limit to bond issues in Mississippi, and several other states give the directors full power to determine the amount. Arizona, California and Illinois permit their commissions to authorize issues of bonds in an amount equal to,

²⁸ P. U. R. 1916, B8.

²⁹ 88 Atl. 348.

less than, or greater than the capital stock. The Arizona commission has favored the restriction of bonds to the amount of stock, while that of California has declared that 70 per cent of the capital in the form of bonds is the maximum to be authorized.³⁷ Bonds were limited to 50 per cent of the capital in the case of a California water company owning wells that might not be permanent.³⁸ A Connecticut law prevents the issue of bonds in excess of one-half the amount actually expended on the railroad.³⁹ The Texas law makes the value of the property the limit for bonds. The laws of Indiana and Wisconsin declare in general terms that the indebtedness of the corporation shall bear a reasonable proportion to the stocks issued by the corporation.⁴⁰

The definite proportion that must be maintained between stocks and bonds is prescribed in many states.⁴⁰ The most common requirement is that the bonds⁴¹ or total indebtedness⁴² shall not exceed the capital stock, modified in Montana and New Mexico by the amount subscribed. Connecticut⁴³ and New Jersey limit the total indebtedness to the stock paid in, but bonds to twice this amount may be issued in other states.⁴⁴ The maximum amount of bonds is limited to two-thirds of the capital stock in Iowa, Nebraska and Utah. In Minnesota, the indebtedness exclusive of mortgage bonds must not exceed two-thirds of the capital stock, but the total indebtedness may be three times the capital stock. An interstate corporation may find itself conforming to the laws of one state only to defy those of another. An established proportion between stocks and bonds is necessary to compel the owners to put into the business enough to make it to their interest to maintain the property in an efficient condition, rather than to exploit it to secure dividends. Merely to condition the amount of bonds on the total securities does not meet the situation, especially if the stock is not fully paid. The bonds should be in proportion to the total value of the assets and not to any quality of the capital stock. In quantity, there is

³⁷ P. U. R. 1915, A787, D347.

³⁸ *Id.* 1915, B38.

³⁹ Code 1902, sec. 3804.

⁴⁰ For exact reference see Table II.

⁴¹ Arkansas, Idaho, Maryland, Missouri, Nevada, Ohio.

⁴² Idaho, North Dakota, Oklahoma, South Dakota, Washington, Wyoming.

⁴³ Code 1902, sec. 3804.

⁴⁴ Delaware, Massachusetts, Pennsylvania, Washington.

already an overabundance of legislation, but there is need of the adoption of a basis that will give greater definiteness.

Securities of whatever character must be issued only for *legitimate purposes*. The chief duty of the commissions is to see to this requirement. To leave no doubt that the commission's decision is final, many states forbid the utility or railroad to apply the proceeds of securities to any purposes not specified in the commission's certificate,⁴⁵ nor in excess of the amount authorized.⁴⁶ The majority of commissions are limited at the outset to inquiring whether the issue under consideration is for purposes in accord with the nature of the business carried on by the particular corporation. The unnecessary duplication of facilities by competing companies may continue unchecked.⁴⁷ The commissions of Ohio and Vermont have been given the right to reject the applications if not convinced that the proceeds will be spent for the general good of the public, and the acts of California, Arizona and Illinois permit of the same broad interpretation. A few other commissions, as Maine,⁴⁸ by a liberal interpretation of their power in regard to certificates of convenience and necessity, may prevent duplication of plants in the interest of the public. Every unnecessary duplication of any part of a public service corporation's plant, used solely for competitive purposes, results in reducing to scrap value that much of the property of one or both companies. Where the evils of competition and its wasteful extravagances are not prevented by public control, the burdens of the utility are unjustly increased and the public in no manner benefited. Every commission should have the power, and it should be its duty, to coördinate the corporate with the public needs, by preventing the issue of securities for unnecessary construction.

The purpose for which securities may be authorized, as set forth in the laws, fall into five general classes:

1. The acquisition of property.
2. The construction, completion, extension, or improvement of its facilities or properties.

⁴⁵ Arizona, California, Illinois, Kansas, Massachusetts, Missouri, New Hampshire, New York, Ohio, Wisconsin.

⁴⁶ Arizona, California, Illinois. See Table II.

⁴⁷ P. U. R. 1915, B55, D160; 1916, C42.

⁴⁸ *Id.* 1916, A418.

3. The improvement of maintenance of its service.
4. The discharge or lawful refunding of its obligations.
5. The reimbursement of the treasury⁴⁹ for moneys actually expended from income, or from any other moneys in the treasury not secured by the issue of stocks or bonds.

The first group, the acquisition of property, includes the purchase of rights of way and of other necessary real estate, and the acquisition of the property or securities of related systems. The securities must represent a permanent addition to the facilities of the railroad or utility. The public service acts of ten states forbid the capitalization of the right to be a corporation, or the capitalization of any contract for consolidation or lease.⁵⁰ If issues were allowed for such purposes, they would rest upon anticipated earnings and not on present assets, always a doubtful proceeding, particularly unjustifiable in the case of railroads and public utilities.

The second group covers all the basic equipment that directly furthers the company's business, including the cost of welfare buildings, when not directed beyond suitable provision for the health and safety of employees.⁵¹ What proportion, if any, of the securities authorized for construction costs should be credited to promotion fees has not been decided uniformly by the state commissions. In recognition of the value of the services of the promoter, Iowa passed a law in 1911 requiring the labor performed in effecting the promotion of steam and electric railways to be taken into account in fixing the amount of capital stock. The Maine commission authorized the issue of stock to the promoter of a railroad, although only preliminary organization work had been done.⁵² The California commission authorized stock to the par of \$75,000 for promoter's services in projecting a railroad that could be financed at a sum not to exceed \$750,000.⁵³ These rulings partake of extremes in expressing appreciation of the work of the promoter, but are based on a correct principle, for the work of the promoter in the field of modern

⁴⁹ Arizona, California, Illinois, Indiana, Missouri, New York, Ohio, Wisconsin. The other four groups are mentioned in the laws of these states and of Georgia, Kansas, Maine, Maryland, Massachusetts, Michigan, Nebraska, New Hampshire.

⁵⁰ Arizona, California, Illinois, Indiana, Maryland, Missouri, Nebraska, New York, Ohio, Wisconsin.

⁵¹ P. U. R. 1915, B582.

⁵² P. U. R. 1916, D260.

⁵³ *Id.* 1915, F311.

industry is co-important with the work of the engineer, and a condition precedent to the latter's employment. Less favorable consideration has been accorded the promoter in Arizona,⁵⁴ Massachusetts,⁵⁵ New Jersey⁵⁶ and Ohio. The Maryland commission has declared that the cost of financing through promotion agents is a proper operating expense.⁵⁷ There are few commissions that do not take this factor into account, although they may refuse an award under that name. All states permit of the issue of securities to meet engineering costs. The large engineering firms are taking a lead in the promotion field. Their work of organizing and financing the project is distinct from the work of actual construction, but a single fee may be received for the completed project, the promotion costs being absorbed in the engineering costs.

The third group, improvement or maintenance of service, places a heavy burden of interpretation upon the commissions, in determining what may properly be included under this classification. Working capital falls under this division. The Massachusetts Railroad Commission refused to authorize securities for this purpose. To meet the special need of street railways, a law was passed permitting the issue of stock to provide working capital, not to exceed 5 per cent of outstanding stock, or an issue of bonds to an amount determined by the commission.⁵⁸ In general, the commissions authorize securities to provide working capital, in an amount varying with the nature and extent of the business.⁵⁹ Operating expenses and replacements also belong in the third group. They may not be capitalized in the form of stocks in any part of the Union. It lies, however, within the discretion of several commissions to concur in the issue of bonds or notes for these purposes.⁶⁰ In every state, permission is withheld unless the corporation proves its ability and willingness to make

⁵⁴ P. U. R. 1915, B1043.

⁵⁵ *Id.* 1915, A15.

⁵⁶ *Id.* 1916, D77.

⁵⁷ *Id.* 1916, B925.

⁵⁸ Acts of 1909, C. 485.

⁵⁹ California, P. U. R. 1915, E834; Illinois, *id.* 1915, F235, 1916, C281, 704; Indiana, 1915, C561; Missouri, *id.* 1916, F49; Nebraska, *id.* 1915, B416, D160, 1917, A907; New Jersey, *id.* 1915, B601; New York, Public Service Commission Reports, Hearings and Decisions, I, 166.

⁶⁰ Arizona, California, Illinois, Missouri, New York, Ohio, Wisconsin; see Table II under "Purposes" for references. Massachusetts, Acts 1914, ch. 671 (street railways).

good out of earnings the amount, either by direct payments to a sinking fund, or by investments in capital assets.⁶¹ The New York Second District Commission has well summarized the advantages accruing from permitting issues for operating expenses, declaring that:

this policy enables the companies to absorb early losses to continue to serve the public without interruptions uniformly attendant upon receiverships and makes them comparable to industrials and other unregulated fields for investment, so far as the possibilities attendant upon external development are concerned.⁶²

Where the power to authorize issues for replacements and operating expenses is conservatively exercised, it may prove of public benefit in those cases where an insufficient depreciation fund has been carried, and an inefficient service will result from a continued use of obsolete or worn out equipment. The requirement of a restoration to the capital account of an equal amount reduces the measure to a purely temporary expedient. The railroads, as a whole, have no need of availing themselves of this privilege. The enforcement of present day stringent accountancy rules will soon obviate the need of any utility resorting to this method, by compelling the maintenance of adequate depreciation funds.

The fourth group, the discharge or lawful refunding of the company's obligations, presents no particular problem of interpretation.

The fifth group, reimbursement of the treasury for funds employed in the extension, improvement and betterment of the properties of the utility corporation or railroad receives unanimous approval by all commissions, when the securities are to be sold and the funds turned into the treasury.⁶³

When such securities are in the form of stocks to be distributed in lieu of a cash dividend, there is a decided divergence of opinion as to the propriety of consenting to their issuance. The act creating a commission for the District of Columbia, and the laws of Massachusetts, New Hampshire and South Carolina forbid scrip dividends. The courts of South Carolina, however, have held that the capitalization of a new company formed to purchase the property of two exist-

⁶¹ P. U. R. 1916, C769, D551; *id.* 1917, A889.

⁶² New York, Public Service Commission, Second District Ninth Annual Report, v. I, p. 7.

⁶³ 94 Atl. 193,

ing companies at full value, though in excess of the capitalization of the existing companies is not in violation of this statute, even if the securities are to be taken by the stockholders of the old corporations.⁶³ According to this decision, the law may be circumvented without very great inconvenience and is practically nullified. Some commissions, as Ohio, favor the sale of such securities, in place of a direct issue to the stockholders, and the distribution of the funds as a cash dividend.⁶⁴

Many state laws permit stock dividends in an amount represented by actual investment in the corporation of net earnings.⁶⁵ The commissions of California,⁶⁶ Illinois,⁶⁷ Indiana⁶⁸ and New Jersey⁶⁹ have rendered decisions to the same effect. The advantages of permitting stock dividends are several. Some surplus is essential to every corporation to provide for emergencies and to stabilize dividends. To keep this in the form of idle cash is an economic waste. To put it entirely into outside investments, which the management cannot control, is a risk, to lessen which unusually small returns must be accepted by investing in preferred securities. By the employment of the surplus in its own business, a corporation is enabled to make improvements when needed acting independent of conditions in the money market, and to do so without the payment of interest. The public is saved this interest charge, since the corporation may not exact interest on its own funds, but may only issue securities to the amount of the net property addition. With the present powers of investigation possessed by commissions, there is no danger in permitting the investment of a corporation's surplus in its own property, and the distribution of a stock dividend when the improvements are completed. This is particularly just when the owners have refrained from all dividends in order to build up the credit of the corporation.

The legitimate purposes as defined in the laws are sufficiently broad not to check the healthy expansion of public service corporations entirely intrastate, but the conflicting interpretations by the

⁶³ P. U. R. 1915, A483.

⁶⁴ Kansas, Maine, Missouri, Ohio, Wisconsin, West Virginia (*see* Table II).

⁶⁵ P. U. R. 1915, C324.

⁶⁶ *Id.* 1915, A205.

⁶⁷ *Id.* 1915, A540.

⁶⁸ *Id.* 1915, E72.

different state commissions retard the fullest development of inter-state corporations.

Railroads and public utilities are limited not only as to the character of the securities and the purposes for which they may be issued, but also as to what may be received in *payment for securities*. Many states have constitutional provisions to the effect that stocks or bonds may not be issued except for an equivalent in money paid, labor done or property actually received and applied to the purposes for which the corporation was created; that all fictitious increase of stock or indebtedness is void; and that neither labor nor property may be received in payment at a greater value than the market price at the time such labor was done or property received.⁷⁰ The same provision is incorporated in the statutes of many states.⁷¹ The purpose of such statutes is to restrict issues to actual investment, and they are therefore constitutional.⁷²

The enforcement of these provisions is left entirely to the directors in several states, and their judgment may be reversed only in fraud proceedings.⁷³ If the issue is for other than money, Iowa requires the consent of the Executive Council of State, which, if necessary, may make an investigation and ascertain the real value of the property to be transferred.⁷⁴ In Vermont the issue of shares of stock for property is subject to special approval by the shareholders, to whom all particulars must be submitted.⁷⁵ Other states have made it the duty of their commissions to enforce the provisions as to the form of payment. In Virginia, if the securities are issued for property or services already received, the commission may investigate the value of the property. Texas requires special approval of the commission if bonds are to be issued in advance of the completion of a railroad. In Wisconsin, a railroad or utility is restricted in the issue of securities for services or property to the true money value, as determined by the commission, in an amount equal to the

⁷⁰ Alabama, sec. 234; Arizona XV, 4; Arkansas XII, 4; California XII, 11; Delaware IX, 3; Idaho XI, 9; Illinois XI, 13; Kentucky, sec. 193; Louisiana, sec. 266; Mississippi, sec. 196; Missouri XII, 8; Nebraska XI, 5; South Carolina IX, 10; South Dakota XVII, 8; Utah XII, 5; Virginia, sec. 167.

⁷¹ See Table II under payment.

⁷² P. U. R. 1915, A618 (Massachusetts).

⁷³ Delaware, Pennsylvania, South Dakota, West Virginia.

⁷⁴ Code 1913, sec. 1641b.

⁷⁵ Laws of 1910, 143, sec. 6.

face value of the stocks and not less than 75 per cent of the face value of the bonds.

The decisions of the commissions conflict as to the proper measure of the value of the property, whether actual cost, reproduction new, or present value. The Maryland commission refused to authorize the issuance of securities beyond the value of a public service company's property, although the company had actually expended in the plant a larger sum than it sought to capitalize.⁷⁶ In contrast, New Hampshire granted authority to issue securities to cover the actual cost of construction, although a valuation showed a present cost of reproduction new somewhat less than the actual cost.⁷⁷ The Texas law permits the purchasers of a railroad to issue securities to the full value of the property, irrespective of the purchase price. The California commission gave consent to a reorganization plan that involved the issue of securities beyond the value set by the company.⁷⁸ In Maine, a company was denied the right to capitalize more than the purchase price.⁷⁹ Extreme liberality was displayed by the Maine commission in another case, when it authorized the issue of bonds, although the company had no physical property.⁸⁰ Such inharmonious decisions introduce a measure of uncertainty that is particularly disturbing in the case of railroads that are national in scope, whatever the length of line in any one state.

* These same principles apply to reorganizations and consolidations. Georgia and Wisconsin limit issues of securities in such cases to the fair value of the property. The California commission has not been strict in valuations for this purpose, in one case making no effort to eliminate undue expense in connection with the property.⁸¹ Several states provide that the stock of consolidated corporations must not exceed the aggregate capital stock of the corporations consolidated at the par value and any additional sum paid in cash.⁸² The total amount of securities that may be issued upon the re-

⁷⁶ P. U. R. 1915, A812.

⁷⁷ P. U. R. 1915, E931.

⁷⁸ *Id.* C807.

⁷⁹ *Id.* E109.

⁸⁰ *Id.* 1916, D260.

⁸¹ *Id.* 1915, F569.

⁸² District of Columbia, Illinois, Maryland, Missouri, Nebraska, New York, Ohio.

organization of a corporation is limited to the fair value of the property in Pennsylvania, as determined by the commission in Illinois, New York and Texas. Ohio permits an issue to the full value of the old securities. When the amount of securities is conditioned on the sum of the securities of the separate companies the new issues partake of all the evils of the old. If the par of such securities is more than the real value of the properties, the "water" is not eliminated. If the par represents less than the real value, the owners are penalized to the extent of the difference, when they should be rewarded for their thrift in increasing the assets of the corporation out of savings. The issue of securities to the fair value of the property, as determined by the commission, whether greater or less than the par of the old securities, is the most just method, and the only one really ensuring value received.

PAR VALUE AND SELLING PRICE

If the many state laws which limit securities to a reasonable amount for lawful purposes and require the corporation to receive value in full, were universally executed, no stock would sell for less than par and bonds would sell for their exact value, a condition only approximated in a few states.

The par itself, as prescribed in the statutes, is far from uniform. Some states leave the decision to the board of directors. In Tennessee, railroad stocks may be issued with a par of \$100 or less. In Colorado, the par may vary from \$1 to \$100, in Maryland and Pennsylvania it must be \$50, in the majority of states it is placed at \$100.⁸² Railroad bonds may have a par of \$50 in Iowa, \$100 in Massachusetts and Vermont, \$500 in Nebraska, and \$1,000 in Wyoming. The maximum interest on bonds, which partly determines market price, is fixed at 6 per cent in Texas, 7 per cent in Arkansas, Massachusetts and Ohio, at 8 per cent in Iowa, and at 10 per cent in Michigan, Nebraska and Wyoming.

The par of the securities of many corporations has no relation to the value of the property, and consequently the selling price and the par value are rarely equivalent terms. The states which have not conferred on their commissions power to regulate securities give

⁸² Arizona, Connecticut, Florida, Georgia, Massachusetts, Michigan, Mississippi, Montana, Nebraska, New Hampshire, Vermont, Virginia (See Table I, "Par").

the directors full power to set the price. Virginia also leaves the price to be determined by the directors. Some commissions have unlimited power to fix prices.⁸⁴ Ohio has agreed to a price as low as 80 for stocks, the policy of the California commission is not to allow a price less than 80-85 as a minimum,⁸⁵ and Illinois requires par to be received. The sale of stock at less than par is permitted in Indiana and Georgia if agreed to by the commission, which, except in such a case, does not have power to fix the price. Railroad stocks may not be sold for less than par in Maine. In the case of other utilities, the commission will not authorize the sale of a stock at less than par by a new corporation, but holds itself free to do so in the case of an existing corporation.⁸⁶ Other commissions require all stock to be paid in full.⁸⁷

An exception to the requirement of all sales at par is made in New York in the case of convertible railroad bonds. The New York law authorizes the conversion of railroad bonds into stock at less than its par value, but not less than the market price at the time of the stockholders' consent to the bond issue.⁸⁸ In Maine, Massachusetts and New Hampshire railroad stocks must be sold neither for less than par nor less than the market price.⁸⁹ The same law holds for public utilities, except in Maine where the commission may permit the sale of such stock for less than par, but has refused to do so in the case of any new company.⁹⁰ In these states the stock must first be offered to the stockholders, and all shares not so disposed of must be offered at public auction under the same restrictions as to par and market price. With the exception of the New England states, it is not customary for the commission to set the price, if above par, but the rule is that the sale be made at the highest price obtainable, not less than par.

To require bonds to be sold at par is the exception. The Massachusetts commission discourages the sale at less than par. The Maine commission, however, holds that it is not its policy to refuse

⁸⁴ Arizona, California, Illinois, Ohio.

⁸⁵ P. U. R. 1916, C779.

⁸⁶ *Id.* 1915, C361.

⁸⁷ Michigan, Missouri, New Jersey, New York, Texas, Wisconsin.

⁸⁸ Railroad Law, sec. 8, sub. 10.

⁸⁹ See Table II under Selling Price.

⁹⁰ P. U. R. 1915, C361; also Maine, Public Utility Commission Report, v. II, p. 298.

to authorize issues of bonds for less than par.⁸⁹ The minimum price in Indiana and Wisconsin is 75 per cent of par.⁹⁰ Texas requires that full value be received for bonds, preventing a sale for less than par.⁹¹ Some states permit the sale of bonds at the price determined by the board of directors.⁹¹ Missouri has allowed bonds to be sold as low as 70, and Illinois for 73. New Jersey and Michigan favor a minimum of 80. The price of bonds is determined by such factors as the rate of interest, the life of the bond, the degree of security, the method of payment and any privileges, such as the right to convert into stock. The price is determined by the current rate for money for similar investments, and a uniform price is neither possible nor desirable.

The difference between the face value of the bonds and the selling price measures the cost to the corporation of obtaining money at a given rate of interest. The Iowa law is based on a false foundation, which authorizes the bond discount to be taken into account as an element of value in fixing the amount of capital stock that may be issued.⁹² Bond discount is an expense, which the state commissions, in all valuation proceedings, require to be amortized out of income.⁹³

SUMMARY AND CONCLUSION

The charges of incompleteness or inadequacy or both may be placed against many of the laws controlling the security issues of railroads. Where no special administrative body is entrusted with their enforcement, they remain inoperative, unless some noteworthy misapplication of power by the directors arouses public opinion. The pure publicity provisions in the public utility acts of Pennsylvania and Virginia are no improvement over all absence of commission control. Filing as a public document is not synonymous with making public. More complete information is more readily obtained from banker or stockbroker. The expenses of management of railroads and public service corporations are increased without any benefit to the public, the investor or the corporation.

⁸⁹ Delaware, Iowa, Louisiana, Nebraska, Utah and Wyoming, see Table II, final column.

⁹⁰ Code 1913, sec. 1641b.

⁹¹ California P. U. R. 1915, E197; District of Columbia *id.* 1915, B546; Illinois *id.* 1915, A804; Massachusetts *id.* E370, Missouri *id.* 1916, E544; Ohio *id.* 1916, E670.

Slightly more justifiable are the statutes which require the commission to investigate the statements made in the application. The mandate resting on these commissions, however, either to accept or reject the application in the form submitted, has caused them to exercise extra-legal powers by imposing conditions. Such action is proof of the inadequacy of the law. It is the law as it stands, and not as enlarged by the dangerous practice of reading into it increased powers, that is to be criticised. Judged on its own merits this type of control is highly deficient, for it imposes more burdens than pure publicity, while the gains are only problematical, certainly not proportionately greater.

Some power should be granted the commission to modify the application, with due recognition that the danger from extremes is not less in granting too much than in granting too little discretion. So long as salaries are low, qualifications for public office less, and the power of appointment exercised to distribute political plums rather than to reward ability, it is inviting disaster to substitute unconditionally the judgment of public officials for that of persons of long special training. The value of commission control rests upon the ability of the commissioners to act as detached, impartial observers, checking but not replacing the decisions of corporate officials, whose judgment may be warped by too narrow attention to a single interest.

Present legislation is, as a whole, unsatisfactory, protecting neither the public nor the corporation and its investors. Despite its imperfection, this legislation has been in response to a rapidly growing realization that the physical plant of a railroad or public utility is not a gift out of the clouds; that regulation of rates and services is only partial regulation, necessitating the inclusion of securities to round out the circle.

Control of securities is necessary to protect the corporation against itself. In fact, "Chapters in Erie," the Chicago and Alton deal and similar abuses of corporate powers gave rise to the agitation for the control of securities. The recent financial troubles of the Rock Island, the Frisco and other railroads are modern evidences that the corporation might profit from a review of the directors' decisions by an impartial tribunal.

Protection of the investor is also of vital interest. Until recently his claims were disregarded. Existing investments could be

submitted to any number of burdens without the possibility of escape. The holder of free funds, however, notes all such tendencies and is quick to divert his money into more promising channels. With a dull market for railroad or other public utility offerings, the public fails to acquire needed facilities, and is thus impressed with the justness of the investors' claims.

The public itself is most directly benefited by security control. It is often asserted that securities have no bearing upon rates, and commissions declare that they do not take them into account. But a careful investigation of the proceedings of any commission will reveal instances in which the rate was based upon the condition of the corporation's securities. Always a return is insisted upon. "It is the setting in which the problem (of rates) is most frequently submitted for judicial consideration," the Interstate Commerce Commission has declared.²⁴ Aside from rates, every reorganization, the direct product of unwise security issues, upsets the business equilibrium of the entire country. Unwise security issues also react to the detriment of the public by poorer service, inadequate maintenance and depreciated equipment.

Present regulation does not solve the problem of proper security control, yet some regulation is expedient. The first step needed to clarify the situation is to distinguish between corporations that are interstate and those which are intrastate or local in character. Railroads and corporations controlling facilities essential to the efficient operation of the railroads are of chief interest in the first class, but whatever corporations are placed under the control of the Interstate Commerce Commission should be included. A railroad's securities are the *sine qua non* of its establishment and extension, are co-existent with each foot of its line, and cry out for uniform treatment, possible solely through national control. More detailed consideration of federal control is not required here, except to remark that the securities of interstate corporations should be placed under the sole and exclusive control of a central federal body, an adjunct of the Interstate Commerce Commission, and forming a part of a rational scheme of complete federal regulation.

Federal regulation of only interstate corporations leaves a very wide field to the states. Light, heat and water companies and street railways are a few of the corporations whose securities should

²⁴ Interstate Commerce Commission, 22d Annual Report, p. 86.

be regulated by state commissions. Appointment to such commissions should have some more efficient base than political prestige. Commission control should be positive, for there is no need to regulate the well managed corporation, and the fear of publicity will prove inadequate to prevent the unscrupulous from enriching themselves.

The bread pill stage of regulation must be put behind, whether the regulation is to be by state or federal commissions. Thorough investigation and valuation should be made before approval is granted. Restrictions should be placed upon the power of the commission as well as upon the corporation. It should be unlawful for the commission to authorize issues far in excess of the value of the property. There is no reason for the commission to decide the kind of security, except to prevent an unsafe proportion of debts to ownership shares. Supervisory power over prices is sufficient, although a minimum price for bonds and no par for stock might add efficiency to the legislation. The duty of the commission to follow up the disposition of the proceeds from the sale of securities is no less important than the approval itself. Finally, uniformity is desirable for all security legislation, since the investment market is national.

The beneficial results of the right kind of legislation are incalculable. No legislation causes a haphazard, mushroom growth. Irrational legislation destroys the fine network of confidence without which the inflow of funds will soon cease and development come to a standstill. Rational legislation instills confidence, so that the full complement of needed funds is secured quickly and cheaply.

DESIRABLE SCOPE AND METHOD OF FEDERAL REGULATION OF RAILROAD SECURITIES

BY MAX THELEN

In preparing a paper on "Desirable Scope and Method of Federal Regulation of Railroad Securities," as I have been requested to do, it is necessary to make a number of assumptions. The writer of such a paper must assume for the purpose of the paper that railroads will remain in private ownership.

It may be assumed, furthermore, that it is not necessary in this paper to demonstrate the necessity for public regulation of railroad securities. Heretofore, it has at times been urged that railroad securities have nothing to do with the regulation of railroad rates, service or facilities and that, accordingly, there is no necessity for public regulation of their issue. It seems clear, however, that a railroad whose financial structure is unsound not merely has great difficulty in maintaining reasonable rates and adequate service but also finds it practically impossible to secure new funds for necessary additional capital expenditures. The predicament of the railroads which, even before the outbreak of the war, found themselves unable to secure the additional funds urgently needed for the enlargement of terminals, the construction of double tracks, the purchase of additional locomotives and freight cars and for other capital purposes was largely caused by excessive security issues or an unhealthy preponderance of funded indebtedness over capital stock. Our failure in the past to provide adequate regulation over the security issues and the financial structures of these railroads is largely responsible for their present condition. Our difficulty has been not too much but too little regulation.

The title of this paper presupposes that, to some extent at least, federal regulation of railroad securities is desirable or necessary but that the scope and method of such regulation are open to discussion. In the brief and sketchy manner made necessary by the limits of this paper I shall address myself herein specifically to the desirable scope and the desirable method of the regulation of railroad securities by the federal government.

The subject will be considered under the following heads:

1. Federal versus state control
2. Federal incorporation
3. Control versus publicity
4. Proposed statute

1. FEDERAL VERSUS STATE CONTROL

Heretofore the federal government has made no provision for the regulation of the issue of railroad securities. In the absence of action by the federal government, twenty-one states have provided for such regulation by their respective railroad or public service commissions.¹

In determining whether regulation in a given field of railroad activity should be exercised by the federal government or by the state governments, I have always been of the opinion that the federal government should do whatever the federal government can best do for our people and that the state governments should do whatever they can best do. The test is the good of our people as a whole and not whether a favor shall be extended to the federal government or to the state governments.

Applying this test to the railroad situation, I believe that the regulation of local service, facilities and police regulations can best be done by local authorities. The same conclusion follows, in my opinion, with reference to local rates, with the proviso that legislation should be enacted by the federal government providing for coöperation between the Interstate Commerce Commission and the affected state commissions in the so-called Shreveport situations, involving alleged discrimination between interstate rates and intrastate rates.

However, applying the same test to the issue of railroad securities I have long since reached the conclusion that authority over the issue of securities of railroads engaged in interstate commerce should be exercised exclusively by the federal government. This conclusion is based not merely on an abstract study of the situation but also on an experience of five years as a member of a state railroad commission charged with the duty of regulating the issues of securi-

¹ For a detailed analysis of what the states have done in regulating railroad securities, see article in this volume: "State Regulation of the Securities of Railroads and Public Service Companies." [EDITOR.]

ties of all classes of public utilities, including railroads engaged in interstate commerce.

The reasons for this conclusion may be stated very briefly. Referring first to capital stock, no state can control the issue of stock by a railroad company incorporated in another state. In order to escape regulation of the issue of its capital stock it is now only necessary for a railroad company to incorporate in some state which does not provide for regulation of the issue of the capital stock of railroad companies. The only way to meet this situation is to provide for regulation by the federal government. Referring now to bonds, efficient and economical financing requires that railroad obligations evidenced by bonds shall constitute a lien upon the property of the railroad, irrespective of state lines. As a practical matter, financing in pieces by state lines is not possible. To provide that application for authority to issue railroad bonds must be made to each state in which any portion of the property to be mortgaged is located is not merely dilatory and cumbersome but also leaves open the door to differences of opinion between the authorities of the various states, which differences may result in the defeat of the entire proposed issue. The only prompt and satisfactory control over the issue of railroad bonds is the establishment of exclusive control by the federal government in a single regulatory body.

A number of bills introduced in Congress during the last few years and providing for some measure of control by the federal government over railroad security issues have provided, in effect, that the control by the federal government shall be concurrent with continuing control by the respective state governments. The result of such legislation would be to add one more commission to those already exercising control, and thereby to introduce additional delays and increase the possibilities of differences of opinion between the various public regulatory authorities. Such legislation would complicate the situation and would seem to be inadvisable. The only satisfactory solution is exclusive jurisdiction in the federal government with reasonable opportunity to all affected state commissions to appear before the federal authority and to be heard in matters affecting their respective states.

Under the decisions of the Supreme Court of the United States construing federal statutes referring to hours of service, employers'

liability laws, safety appliances and other fields of railroad regulation, I have no doubt of the legal power of Congress to provide for exclusive regulation by the federal government of the security issues of all railroads to any extent engaged in interstate commerce. If the federal government enters this field and indicates its intention that its regulation therein shall be exclusive, the authority of the states to exercise jurisdiction in this field will be effectively excluded. In this respect I agree with the argument presented to the Committee on Interstate and Foreign Commerce of the House of Representatives in February and March, 1914 and to the Committee on Interstate Commerce of the United States Senate in June and July, 1916 by Mr. Alfred P. Thom, speaking as representative of railroads whose earnings constitute 84 per cent of all railroad earnings in the United States.

2. FEDERAL INCORPORATION

The suggestion has recently been made in certain quarters that federal regulation of railroad security issues cannot be made effective without federal incorporation of all the railroads. This suggestion is contrary to the generally accepted view. The conclusive answer to the suggestion is found in the argument of Mr. Thom before the Committee on Interstate and Foreign Commerce of the House of Representatives in 1914 and in the restatement of his legal conclusions made by him in December, 1916 before the Joint Committee of the Senate and House of Representatives.

The power of the federal government to create a federal railroad corporation rests on its authority to establish an agency or instrumentality to carry into effect the powers vested in the government.² The federal government cannot, by creating a federal railroad corporation, enlarge the powers possessed by the federal government. Whatever the government can do indirectly through the creation of a corporation as its agent it may do directly as principal without the establishment of the agency. Accordingly, the creation of a federal railroad corporation cannot possibly enlarge such powers as the federal government already possesses to regulate the security issues of railroads engaged in interstate commerce. The creation of federal railroad corporations for this purpose is entirely unnecessary.

² *McCullough v. Maryland*, 4 Wheat. 316.

As bearing on the regulation of railroad security issues by the federal government, it may be appropriate at this point to draw attention to the fact that under the plan of federal incorporation presented by the railroads to the Joint Congressional Committee it is provided that no railroad shall be permitted, after a certain day, to continue to engage in interstate commerce unless it has taken out a federal charter; that a federal railroad corporation is to take the place of each existing state railroad corporation; and that the federal railroad corporation shall, under this compulsory plan, have the same securities outstanding as are now outstanding against the state railroad corporation. In other words, by compulsion of the federal government, the existing railroad securities, including all the water therein and all the seeds of financial disease resulting from existing unhealthy railroad financial structures, are to be perpetuated in the new federal railroad corporations. That such legislation should be adopted by Congress seems inconceivable.

This paper will proceed on the assumption that federal incorporation of the railroads is entirely unnecessary to the adequate regulation by the federal government of the security issues of all railroads engaged in interstate commerce.

3. CONTROL VERSUS PUBLICITY

Considerable difference of opinion has heretofore existed on the question whether federal control over railroad security issues shall provide merely for publicity or whether it shall provide for affirmative action by the appropriate public authority before such securities may be issued. These two opposing theories are generally referred to as the "publicity" method and the "control" method.

The publicity method provides that before a railroad corporation may issue securities it must file with a designated public authority a statement of the proposed issue and of its financial condition. Having filed such statement the corporation may then issue the proposed securities without action by the public authority. The control method provides that before the railroad corporation may issue its securities it must first receive the approval of a designated public authority.

The publicity method was favored by the Federal Securities Commission, of which President Hadley of Yale University was chairman, and has been advocated by a number of prominent men

in public life, including two former members of the Railroad Commission of Wisconsin. Of all the states of the Union which have provided for control over the issues of railroad securities, Virginia alone has adopted the publicity method. All the other twenty states which have provided for such regulation have adopted the control method. The chief argument advanced by those who favor the publicity method seems to be that under the control method the public authority is either legally or morally bound to authorize rates sufficiently high to yield a return on the security issues authorized by it as well as on all the preceding security issues. As far as the legal question is concerned, I have seen no authority to support the proposition. To remove any doubt on this question, the federal statute could readily provide that nothing therein contained should be construed to imply any guaranty or obligation on the part of the United States with reference to the securities authorized.

Referring to the assumed moral obligation, it seems obvious that in so far as past issues of securities are concerned, made without governmental action, no such assumed obligation can possibly exist. In so far as issues hereafter authorized by the federal government are concerned, it has never been successfully contended that a governmental authority which authorizes such security issues even morally underwrites the success of the corporation. Due weight will, of course, be given to the investment made by the corporation and to the securities from which the funds thus invested are derived. This statement, however, by no means implies that the corporation is relieved from the ordinary chances which every business takes and that the government either legally or morally guarantees the success of the venture or the integrity, under all conditions, of the security issues authorized by it. In California, where the State Commission acts under the "control method," I have never heard the suggestion made that the state is in the position of a guarantor of the security issues authorized by it. I am also advised that in most of the other states which also have the control method no such suggestion has ever been made.

The chief argument in favor of the control method is that the ability of the utility to render adequate service at reasonable rates and to fulfil the requirements of the public for additions, betterments and extensions depends very largely on the soundness and integrity of its financial structure, and that the construction and

maintenance of healthy financial structures for the protection both of the utility and of its patrons imperatively require the affirmative control over security issues which has now been established in most of the leading states of the Union. In my opinion, control over the issue of securities and the disposition of their proceeds is the keystone of the entire arch of public utility regulation. Regulation which merely provides that the utilities shall file a public record of what they intend to do in connection with security issues would not have prevented the wreck of the Chicago and Alton, the New York, New Haven and Hartford, the Frisco or the Rock Island. I consider such regulation to be entirely ineffective and hence worse than no regulation. In my opinion, based on the experience in California and other states of the Union which have undertaken the regulation of the security issues of public utilities, the only effective method of regulation is the control method.

4. PROPOSED STATUTE

I shall now make a number of suggestions with reference to provisions to be contained in a federal statute establishing control of the security issues of railroads engaged in interstate commerce.

In my opinion the control over security issues of such railroads should be vested in the same federal body which regulates, to the extent to which such regulation has been provided, their rates, service and safety and which ascertains the various facts entering into the value of railroad properties. This conclusion not merely seems logical, but also is in accordance with the practice of all the states which have provided for regulation of railroad security issues. In making this suggestion, however, I wish to draw attention to the fact that no branch of public utility regulation requires more prompt action than requests for authority to issue securities, and to suggest that if this authority is vested in the Interstate Commerce Commission, adequate machinery must be provided so that the authority may be promptly exercised.

The statute, in my opinion, should apply to all railroads which are engaged in interstate commerce but should not, for the present, include street railways.

The statute should apply to holding companies as well as to operating companies. I am not in sympathy with the suggestion that the regulation should not apply to railroads which are located

entirely within the limits of a single state. If such railroads are engaged in interstate commerce, as most of them are, they should be just as much subject to regulation of their security issues by the federal government as the railroads whose situation differs only in the fact that they happen to cross a state boundary line. The test, in my judgment, should be whether the railroad is to any extent engaged in interstate commerce and not whether its tracks and ties happen to be located entirely within the boundaries of a single state.

The statute should state the purposes for which railroad securities may be issued. These purposes are generally defined in the state statutes to be the acquisition of property; the construction, completion, extension or improvement of facilities; the improvement or maintenance of service; the discharge or lawful refunding of obligations; and the reimbursement of moneys expended from earnings or from other moneys in the treasury of the utility not secured from the issue of stocks, bonds or other evidences of indebtedness, for any of the aforesaid purposes.

The statute should provide that no railroad corporation subject thereto should have authority to issue any stocks or stock certificates or any bonds, notes running longer than a specified term, or other evidences of indebtedness unless a petition asking authority to make the issue has first been filed with the Interstate Commerce Commission and the Commission has made its order thereon specifying the issue which is authorized, and stating the amount thereof and the purpose or purposes to which the issue or the proceeds thereof may be applied.

I consider it unwise to have the statute specify in detail the contents of the petition. It would be far more desirable, in my opinion, to have the statute provide that applications should be made in such form as the Interstate Commerce Commission may from time to time determine and prescribe and that the Commission should have the power to establish rules and regulations governing the contents of the petition and the procedure in connection therewith. The experience of the states shows the wisdom of a statute unencumbered by unnecessary detail and providing flexible regulation within the definite principles established by the statute.

The statute should provide that notice should be given to the railroad commission or public service commission or public utilities

commission or other appropriate authority of each state in which the petitioner operates, with the right on the part of such states to appear before the Interstate Commerce Commission and to be heard upon the application. The Interstate Commerce Commission should be authorized to give such additional notice as in its judgment is necessary and to hold such hearings as it considers advisable.

The statute should provide that the Commission may by its order grant permission for the issue of securities in the amount applied for, or in a lesser amount, or not at all, and that the Commission should have the right to attach to the exercise of its permission such condition or conditions as it may deem reasonable and necessary. The power of the Commission to impose conditions in its order is a matter of very great importance and should not be overlooked in the framing of the statute.

The Interstate Commerce Commission should be authorized to require the railroad companies, in such form and detail as the Commission may consider advisable, to account for the disposition of the proceeds of securities authorized and to establish rules and regulations to insure the disposition of the proceeds for the purpose or purposes specified in the original order or in such amended or supplemental orders as the Commission may from time to time make.

The statute should provide that the Commission shall have no power to authorize the capitalization of the right to be a corporation, or to authorize the capitalization of any franchise or permit in excess of the amount (exclusive of any tax or annual charge) actually paid to any public authority as the consideration for the grant of the franchise, permit or right. Franchises are granted by public authorities to enable private capital, as agent for the public, to exercise functions which the public itself might directly perform. To have private capital ask public authorities to grant franchises so that such capital may perform important functions as agents of the public and then to have the grantees of such franchises turn around on the public and claim against the public values for the franchises thus conferred is the height of absurdity and injustice. When the federal government undertakes to control the issue of railroad securities it should be careful to insert in the statute appropriate language so as to prevent the capitalization of any such franchises, permits or privileges except to the extent of actual payment made therefor by the grantee of the franchise, permit or privi-

lege to the public authority granting the same. An ounce of prevention is worth a pound of cure.

In order to set at rest definitely the claim that any governmental guaranty, either legal or moral, will follow from authorizations to issue securities, it may be well, although unnecessary, to insert in the statute a clause providing substantially that nothing therein contained shall be construed to imply any guaranty or obligation on the part of the United States.

The statute should provide appropriate penalties for its violation. In my opinion, it is not sufficient to provide that violations or proposed violations may be enjoined and that persons guilty thereof may be fined or imprisoned. I suggest the additional provision found in the California Public Utilities Act, to the effect that any security issued without an order of the commission authorizing the same then in effect shall be void, but that failure in any other respect to comply with the conditions of the order shall not render such security void except as to a corporation or person taking the same otherwise than in good faith and for value and without actual notice.

Closely akin to control over security issues is control over the sales, leases, mortgages, encumbrances, mergers and consolidations of public utility properties. I suggest that the federal statute should provide that no railroad corporation subject thereto should thenceforth sell, lease, assign, mortgage or otherwise dispose of or encumber the whole or any part of its property necessary or useful in the performance of its duties to the public or any franchise or permit or right thereunder, nor by any means whatsoever, direct or indirect, merge or consolidate its property with any other common carrier subject to the Interstate Commerce Act without having first secured from the Interstate Commerce Commission an order authorizing it so to do.

There is nothing unusual or particularly difficult in connection with the exercise of the powers herein suggested to be conferred upon the Interstate Commerce Commission. Such powers are now exercised in the leading states of the Union with reference to railroads and, to a considerable extent, other classes of public utilities. The principles applicable to such control, the proceedings before the commissions, the forms of the orders, the method of reporting the security issues by the utility and the disposition of the proceeds

of such issues and every other factor connected with the problem have been worked out in detail by the various state commissions.

That the exercise of these powers by these states has had a salutary effect in protecting both the public utilities and their consumers and in improving the sale of public utility securities is generally conceded. That necessary public utility development continues unaffected by such regulation is shown by the fact that in California in excess of two hundred and thirty million dollars of new money has been invested in public utility enterprises since March 23, 1912, the effective date of the Public Utilities Act, being the largest amount of such investment in any corresponding period of the state's history.

By reason of the peculiar facts surrounding railroads engaged in interstate commerce, the control of their security issues by the states has not been as prompt, satisfactory and effective as the railroads, their patrons and their investors have the right to expect. For that reason the ineffective control over railroad security issues now established in a portion of the states of the Union should give way to prompt, effective and unified control by the federal government.

THE POINT NOW REACHED IN THE FEDERAL REGULATION OF INTRASTATE RATES

By J. A. LITTLE

FEDERAL AUTHORITY OVER INTRASTATE COMMERCE BEFORE THE SHREVEPORT CASES

The principal motive which actuated the sovereign states in sending delegates to the convention which framed the Constitution of the United States is not mentioned in the Preamble to that instrument but is found in Article 1, Section 8, which delegates to Congress, among other things, the power "to regulate commerce with foreign nations, and among the several states and with the Indian tribes."

The history of the period following the treaty of peace with Great Britain and prior to the ratification of the Constitution amply bears out this statement. To find a remedy for the conflict between the states which threatened to destroy the weak offensive and defensive alliance of the original thirteen states which was embodied in the Articles of Confederation, Rhode Island presented resolutions calling for a central body to regulate commerce; James Monroe, as a member of the federal Congress, brought in resolutions saying that such regulation was absolutely essential; and James Madison introduced in the legislature of Virginia and had passed resolutions similar to those adopted by Rhode Island with additional provisions calling for a convention at Annapolis to establish a better system of commercial regulations.

Six states sent representatives to the Annapolis Convention of 1786 and they, after extended discussion, came to the conclusion that no remedy for the evils complained of could be prescribed without drastic changes in the powers of the central government which would require the framing of a new constitution. In accordance with this conclusion the delegates to the Annapolis Convention issued the call for a constitutional convention.

Attention is called to these facts as an aid in placing a proper construction upon the commerce clause of the Constitution and in

defining the spheres of action within which the federal and state governments may properly operate.

It does not seem possible that there could have been any doubt in the minds of those who acted for the several states in ratifying the Constitution as to the *exact* power conferred on the federal government in connection with the regulation of interstate commerce since the granting of this power to the federal government was the most important single purpose of the framers of that instrument.

In the debate between those who favored and those who opposed a strong central government and the Constitution of the United States, which provides such a government to do for all the states what they cannot do so well for themselves but retains for the several states the functions which can best be performed by state governments, this question was discussed.

The supporters of the federal plan argued that the commerce clause of the Constitution permitted the new government to control interstate commerce only and that the states were left free to exercise all the governmental powers which had not been specifically delegated.¹ To ensure this construction of the Constitution some of the states insisted upon the passage of the first ten amendments which were primarily designed to preserve the rights of individuals and the several states against any encroachment on the part of the federal government.

It may therefore be said that there was no intent to deprive the several states of power to regulate their internal commerce by any construction placed upon the commerce clause but on the other hand such power was clearly and specifically reserved to the states by the Tenth Amendment.

This division of authority was recognized by the supreme court of the United States in deciding the first case arising under the commerce clause² in which a state enactment was set aside *because it directly regulated and impeded interstate commerce and was hence beyond the power of the state* and not because of any lack of power on the part of the state to regulate its internal commerce, such powers being discussed and upheld in the decision of the court.

The case just referred to is typical of many, other than rate cases, in which the Supreme Court of the United States has uni-

¹ *The Federalist*, 32, 82.

² *Gibbons v. Ogden*, 9 Wheat 1.

formly held that a state cannot lawfully enact regulations of its commerce which operate to burden unduly or impede interstate commerce. In such cases involving navigation laws, safety appliance acts, taxation of interstate commerce and related subjects there has been a conflict between a statute of the state and a valid act of Congress or, an attempted exercise, by the state, of the power granted to Congress by the commerce clause.

As to cases involving the validity of state legislation fixing maximum rates for transportation by railroad, or the lawful orders of state railroad commissions, it may be said that there has been practically no conflict with the power of the federal government under the commerce clause.

It is true that there have been many cases in which it was alleged that the states had interfered with or unduly burdened interstate commerce but a careful examination of all such cases from *Munn v. Illinois* (94 U. S. 113) down to the Minnesota Rate Case (230 U. S. 352) shows that the contentions advanced as to such alleged interference with interstate commerce were mere incidents to the efforts of the railroads to escape regulation by public authority.

It is a significant fact and a fortunate circumstance for the cause of public regulation of carriers and utilities that the Supreme Court has steadfastly refused to condemn state regulation on such alleged grounds.

State regulation of railroads was first attempted about 1873 responsive to widespread complaint as to the arbitrarily unjust, unreasonable and discriminatory charges imposed upon the internal commerce of the various states by common carriers.

It is a striking commentary on the wisdom of our *federal plan* of government to note the quick responsiveness of the state governments to the popular demand for relief from oppression by common carriers as compared with the course of congressional action looking toward relief for interstate commerce from similar evils.

In 1874 the Windom Committee reported as to transportation routes to the seaboard but no action was taken by Congress. When the Cullom Committee reported and the Act to Regulate Commerce was enacted in 1887, many states had already provided railroad commissions with full rate-making powers. *Congress did not give the Interstate Commerce Commission power to fix maximum rates until 1906.*

During the period between the enactment of the first granger laws and the passage of the Hepburn Act in 1906 the states had litigated practically every important question bearing upon the delegation of rate-making power to an administrative tribunal and the practical enforcement of such legislation.

At this point it seems proper to note that during the period of state regulation of rates prior to the passage of the Hepburn Act there was no complaint disclosed by any of the hearings of Congressional committees that the action of state railroad commissions was productive of restraint upon interstate commerce or of discriminations against such commerce.

On the other hand in the hearings of the Senate Committee on Interstate Commerce whose report preceded the passage of the Hepburn Act, we do find the statement that because of the regulation of rates by state commissions shipments moving within the confines of a single state were transported at reasonable rates and that "because of the fact that the defendants are unrestrained as to such interstate rates, and by reason of the combination of such defendants whereby competition is eliminated, that such interstate rates are abnormally high."³ Such "*burdens*" upon and "*interference*" with interstate commerce clearly existed because of the failure of Congress to provide adequate remedies and not because of the proper exercise of the states' power of regulation.

As to the discriminations existing which might become the subject of complaint before the Interstate Commerce Commission it seems proper to take the testimony of a representative of the carriers who is described in the record as "possessing unusual legal attainments" and being "an expert on the subject of transportation" which is as follows:

As a matter of fact, all the really important controversies between competing localities (which will furnish by all odds the most important and difficult rate-making propositions) grow almost without exception out of interstate rate adjustments *with which state commissions have nothing to do.*⁴

It is a remarkable fact that all of the complaint against state regulation of rates has arisen since Congress gave the Interstate

³ P. 69 *Sen. Doc. 243, 59th Cong.*

⁴ P. 240, *Sen. Doc. 243, 59th Cong.* Statement of Hon. Walker S. Hines. *Italics mine.*

Commerce Commission power to free interstate commerce from the evils referred to above.

The Interstate Commerce Commission originally refused to take jurisdiction over cases involving alleged discriminations between state and interstate rates arising out of the acts of state railroad commissions or the enactments of state legislatures.⁵

THE SHREVEPORT DECISIONS

On further consideration of this subject in connection with the complaint of the Railroad Commission of Louisiana against the St. L. S. W. Ry. C. *et al.* (23 I. C. C. 31) the Interstate Commerce Commission held that it had full jurisdiction to hear such complaint and provide a remedy.

The order of the Commission in this case held that the class rates maintained by the defendant carriers were unjust and unreasonable and a reasonable maximum schedule was fixed for application from Shreveport, Louisiana, to *specified destinations* in Texas and the carriers were required to "abstain from exacting any higher rates for the transportation of any article" from Shreveport to Dallas, Texas and points intermediate *via* the line of the Texas and Pacific and from Shreveport to Houston, Texas and points intermediate *via* the lines of the Houston, east and west Texas and the Houston and Shreveport, "than are contemporaneously exacted for the transportation of such articles from Dallas or Houston for an equal distance toward said Shreveport." The power of the Interstate Commerce Commission to make this order was sustained by the Supreme Court of the United States in *Houston and Texas Ry. v. United States* (234 U. S. 342).

Accepting the construction placed upon the Act to Regulate Commerce by the Court as correct for the time being let us note what followed this decision.

The complaint of the Railroad Commission of Louisiana was broadened to include every carrier operating in the state of Texas and every commodity for which rates were fixed by the Railroad Commission of Texas and every article of commerce described in the western classification.

In deciding the enlarged case 41 I. C. C. 83 the Interstate Commerce Commission fixed "reasonable" rates to cover traffic

⁵ *Saunders and Co. v. Southern Express*, 18 I. C. C. 415.

moving under class rates and certain specified commodity rates from Shreveport, Louisiana, to all points in Texas and also required the establishment of the "current western classification in effect at the time such traffic moves" to govern all shipments within the state of Texas.

There are several important differences between this and the earlier order which was upheld by the Supreme Court of the United States. The earlier order dealt with retail and the later order condemned wholesale discriminations in rates. I do not wish to imply that mere number is important, but the first order was limited to specific movements of traffic in state and interstate commerce while the last order covered any shipment whether state or interstate which came within range of its terms.

In the earlier case every rate fixed by the Commission was declared to be the "reasonable maximum" for application to interstate commerce and state rates were forced to conform to that standard of "reasonableness" to remove the unjust discrimination found. In the last case the Interstate Commerce Commission fixed reasonable rates to apply to class and commodity rates and dealt with classification in the following language:

Unquestionably the situation between Shreveport and its Texas competitors is such that unless the same classification applies unjust discrimination results. The western classification governs interstate transportation in the territory surrounding Shreveport, including transportation between Texas points and points in other states. *In large part it has received the indorsement of this Commission. Western Classification Case (25 I. C. C. 442).* Considering the findings already made, that transportation conditions for the competitive hauls here involved are substantially similar, *justice demands that the same classification shall apply to all.* We are therefore constrained to find that for the future defendants must establish and apply to transportation of property *between points in Texas the provisions of the western classification in effect at the time such transportation takes place.*⁶

Assuming that this order is valid as to its requirements governing classification it will be noted that:

1. The shipper at Shreveport may complain to the Interstate Commerce Commission against any rate, rule or regulation contained in the classification since the order of the Commission *does not make such rates, rules and regulations the reasonable maxima to apply to the interstate commerce of Shreveport.*

⁶ *Italics mine.*

2. *No shipper of freight between points in Texas can complain to either the State Railroad Commission of Texas or the Interstate Commerce Commission against any rate rule or regulation in western classification because the Texas Commission may not establish any different rate, rule or regulation since such action would come in "conflict" with the power of Congress under the commerce clause by reason of the resulting "burden" to and "interference" with interstate commerce while the Interstate Commerce Commission cannot act because it has never been given the power to fix reasonable rates governing intrastate transportation.*

Under such circumstances the Texas shipper would find himself as much without a remedy for his complaint as was the fish dealer in Pensacola, Florida, who complained of the alleged discrimination resulting from the fixing of express rates from Mobile to Alabama points and who was denied relief by the Interstate Commerce Commission because of its lack of jurisdiction in *Saunders & Co. v. Sou. Express* (18 I. C. C. 415) with this important difference: the Texas shipper cannot even test the reasonableness of the classification, while *Saunders & Co.* were heard as to the question of reasonableness *per se*.

Under such circumstances it seems proper to inquire as to the extent of the "indorsement" which the western classification was given in the report of the Commission in the Western Classification Case (25 I. C. C. 422). In this case it became the duty of the Interstate Commerce Commission to determine the propriety of changes in the western classification which affected 1,263 descriptions of articles in the classification out of a total of 6,046 descriptions or approximately 21 per cent of the descriptions in the tariff. Since each description usually covers the carload and less-than-carload ratings and may carry such ratings for different kinds of packages it is safe to say that the classification covers 12,000 to 18,000 ratings. The commission estimated the total change in ratings to be not over 2,000; hence from 12 to 17 per cent of the total ratings were passed upon by the Commission, and many were rejected.

Can it be possible that the sovereign states have been so effectually shorn of their power to regulate rates that they may not change a tariff issued by an agent of the carriers which has been "In large part . . . endorsed by this (the Interstate Commerce) commission." Surely this cannot be the law either within the deci-

sion of the Supreme Court of the United States or the terms of the Act to Regulate Commerce, to say nothing of the Constitution of the United States.

In deciding the Minnesota Rate Case *supra* the Supreme Court of the United States laid down a very high standard of proof to be met as to earnings, expenses and valuation of carriers seeking to set aside a state rate or schedule of rates because of alleged confiscation. In general it may be said that such allegations must be sustained by clear and convincing proof.

MISSOURI RIVER NEBRASKA RATE CASES

If the Interstate Commerce Commission is right in its determination that the circumstances and conditions surrounding Texas intrastate traffic are similar to those surrounding the traffic between Shreveport and Texas points, it must follow that the rates found reasonable as to Shreveport are reasonable as applied to Texas Intrastate traffic, and the rates established by Texas authorities, lower than such Shreveport rates, are simply less than reasonable. Can it be possible that the state should be deprived of its authority to make rates by the judgment of the Interstate Commerce Commission that rates are less than reasonable where the proof is of a less formal or complete character than would be required to establish a charge of confiscation in a court of law? This question has been answered in the Missouri River Nebraska cases at page 254, as follows:

The Nebraska commission does not question the duty of this Commission to direct the removal of unjust discriminations caused by differences between interstate and intrastate rates. It recognizes our authority under the decision of the Supreme Court in *Houston & Texas Ry. v. United States*, 234 U. S. 342, to direct the removal of such discriminations although state rates are increased thereby. It insists, however, that this authority may not be exercised unless the Commission finds, and is justified by the evidence in finding, that the intrastate rates are confiscatory. This position involves the assumption that a state-made rate or system of rates cannot be said to cause unjust discrimination unless it is unlawful for another reason, namely, that it is so low as to deprive the carriers of their property without due process of law or to deny them the equal protection of the laws. Such an assumption finds no support in those sections of the act which define unjust discrimination and undue prejudice, nor can it be justified in practice or on principle. This Commission is frequently called upon to determine whether a relation of rates is unjustly discriminatory where no question is or can be raised as to whether any of the rates involved are confiscatory. The act gives it no authority to determine whether state-made rates are confiscatory.

The position is wholly indefensible that this Commission must inquire into an issue as to which it has no jurisdiction for the purpose of determining a question as to which its jurisdiction is not only complete, but exclusive.

Except for this contention of the Nebraska Railroad Commission and the views of the Interstate Commerce Commission expressed in disposing of this phase of the case there is little difference between this proceeding and the Shreveport Cases. Whenever the conflict between federal and state regulation of rates is discussed the Shreveport and Missouri River Cases will be the main topics but there have been many other decided cases involving similar situations.

CLASSIFICATION OF PERTINENT DECISIONS

In general it may be said that there are four types of cases which have been presented to the Interstate Commerce Commission relating to "discriminations against interstate commerce" arising by comparison of interstate with intrastate rates which may be classified as follows:

1. Discriminations against the interstate commerce of a particular locality arising in connection with the intrastate commerce of certain localities in another state as to commerce with specifically named destinations in the same state.

2. Discriminations against the interstate commerce of certain localities which result from the intrastate rates applied between certain other localities in another state and the communities in whole sections of the same state which are not specifically named.

3. Discriminations which are alleged by certain communities to exist because of the difference between interstate rates to localities in another state as compared with intrastate rates between all points in that state.

4. Discriminations claimed to exist by certain shippers or localities because of the different rates maintained from such localities to various interstate destinations as compared with the varying intrastate rates existing in the several states embraced in the complaint.

The three Shreveport decisions fall within the first, second and third classes in the order named. The Cement Investigation (I. C. C. Docket 8182) is typical of the fourth class of cases. In this case the Interstate Commerce Commission has undertaken an investi-

gation; on its own motion and by consolidation of cases involving complaints filed, and investigations of rate advance cases affecting the cement rates applying between points in Western Trunk Line Territory and between such W. T. L. Territory and adjacent territories.

In the hearings of this case, the state rates and carload minima applying on cement moving within the states of Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma and Colorado were involved. In a similar case, the Livestock Investigation (I. C. C. Docket No. 8436), the scope of the proceeding will cover questions involving both state and interstate rates applying between all parts of the United States.

SOUTH DAKOTA EXPRESS RATE AND ILLINOIS TWO-CENT FARE DECISIONS

Since its decision in the Shreveport case (234 U. S. 342) the Supreme Court has passed on two other important cases involving similar issues.

In *American Express Co. v. Caldwell* (decided June 11, 1917) the order of the Interstate Commerce Commission in *Sioux City Commercial Club v. American Express Co.* was reviewed and the court held that the express companies were not required to adjust all rates from Sioux Falls and the other South Dakota points named to all other points in the State of South Dakota since the report and order of the Interstate Commerce Commission showed that unjust discrimination existed only in territory commercially tributary to both Sioux City and such Dakota cities. In this connection the Court said:

Where a proceeding to remove unjust discrimination presents solely the question whether the carrier has improperly exercised its authority to initiate rates, the Commission may legally order, in general terms, the removal of the discrimination shown, leaving upon the carrier the burden of determining also the points to and from which rates must be changed, in order to effect a removal of the discrimination. But where, as here, there is a conflict between the federal and the state authorities, the Commission's order cannot serve as a justification for disregarding a regulation or order issued under state authority, unless, and except so far as, it is definite as to the point or points to which it applies. For the power of the Commission is dominant only to the extent that the exercise is found by it to be necessary to remove the existing discrimination against interstate traffic.

In a very recent case⁷ this rule was amplified and extended. The carriers sought to increase all passenger fares from the state rate of 2 cents applicable in Illinois to the interstate rate of 2.4 cents per mile approved by the Interstate Commerce Commission for carriage between points in Illinois and adjacent states. The carriers claimed that such action was necessary to comply with an order of the Interstate Commerce Commission (41 I. C. C. 13). The Public Service Commission of Illinois contended that the order of the Commission was in excess of any power that had been or can be conferred on the Interstate Commerce Commission, but, assuming the existence of power to make the order, that the extent to which it was intended to affect the state-made rates was so indefinite as to render the order void and ineffective.

In determining these questions the Court approved its decision in the Shreveport Case as to the powers of the Interstate Commerce Commission, under section 3 of the Act to Regulate Commerce but held that the order which was in controversy was inoperative and of no effect because of its uncertainty.

What is quoted above from the South Dakota Express Case was restated and approved after which the Court said:

In construing federal statutes enacted under the power conferred by the commerce clause of the Constitution the rule is that it should never be held that Congress intends to supersede or suspend the exercise of the reserved powers of a state, even where that may be done, unless, and except so far as, its purpose to do so is clearly manifested.⁸ This being true of an Act of Congress, it is obvious that an order of a subordinate agency, such as the Commission, should not be given precedence over a state rate statute otherwise valid, unless, and except so far as, it conforms to a high standard of certainty.

INTENTION OF CONGRESS AND FUTURE ADJUSTMENTS

Careful study of the reports of congressional committees as to the evils for which Congress sought a remedy by the enactment of the Act to Regulate Commerce convinces me that there was no intention on the part of Congress to delegate to the Interstate Commerce Commission the power to set aside state legislation or the lawful acts of the administrative tribunals established by the several states.

⁷ The Illinois Passenger Fare Cases decided January 14, 1918.

⁸ Italics mine. *Reid v. Colorado*, 187 U. S. 137; *Savage v. Jones*, 225 U. S. 501; *Cummings v. Chicago*, 188 U. S. 410; *M. K. & T. Ry. v. Harris*, 234 U. S. 412.

In order to establish the jurisdiction of the Interstate Commerce Commission in the Shreveport Case under the rule of construction stated above, the Commission and the Court were compelled to say in effect that the proviso⁹ in section 1 of the Act to Regulate Commerce is merely a general *disavowal of any intention to regulate the rates* to be charged for transportation between points in the same state but Congress nevertheless *did intend to regulate partially* such rates in so far as they may be held to produce unjust discrimination against interstate commerce which is forbidden by section 3 of this Act. It seems fair to say that this construction of the act is so strained as to amount to judicial legislation aimed at an evil not comprehended by Congress when the Act was passed.

It seems well to recognize these facts although no substantial purpose can be served by dwelling upon them as an issue of present moment.

By reason of the decisions in the Express and Passenger Rate Cases, the exercise of the powers and duties of the Interstate Commerce Commission in Shreveport cases will be simplified and facilitated. Under these rules some phases of the final Shreveport decision will have to be better supported by evidence or the decision must fall if attacked in the courts.

This better definition of the principles governing such cases will go far to eliminate friction between the state and federal governments which has been increasing since the Shreveport decisions.

I believe that complete harmony in the regulation of inconsistent state and interstate rates in Shreveport cases can be accomplished by proper legislation which will permit *joint hearing and determination of such causes by the representatives of the state and federal government operating under uniform well defined legislative rules properly designed to govern such proceedings.*

Something along this line has been recommended by the Interstate Commerce Commission and it is to be hoped that this vexing question will soon be satisfactorily settled by such appropriate legislation.

⁹ "Provided, however, that the provisions of this Act (to Regulate Commerce) shall not apply to the transportation of passengers or property . . . wholly within one state and not shipped to or from a foreign country from or to any State or Territory as aforesaid."

NECESSITY FOR EXCLUSIVE FEDERAL CONTROL OVER STATE AND INTERSTATE RATES

BY EDGAR J. RICH

On the 28th day of December, 1917, the President took over the railroads of the United States and assumed control of all their functions, including the regulation of rates. The railroads are now being operated as a national system, and the state commissions are retained merely in an advisory capacity, to perform local functions to such an extent as the Director General may determine. At hearings held before committees of Congress during the month of January, 1918, representatives of the President urged that no legislation be enacted which should in any degree hamper the operation of these railroads as a national transportation system; that control over revenue was essential in order to maintain the efficiency of service. The war has thus emphasized the essentially national character of railroad transportation. The highest efficiency is necessary for a successful mobilization of the national resources of the country, and to that end the supreme control over transportation has been placed in the hands of one supreme authority. State lines have been eliminated in transportation to the same extent that they have been eliminated in every other line of the war's activities. War is exclusively the nation's business, and all the engines of warfare, of which the railroads are the greatest, must be under the exclusive power of the Commander-in-Chief.

To what extent do the same principles of exclusive control apply in times of peace? We must begin now to perfect a system of regulation which shall best be adapted to the nation's needs when these railroad systems are turned back to their owners after the war has ended. It is inconceivable that an instrumentality whose essentially national character has been demonstrated during the stress of a titanic conflict should again become subject, to the same extent as heretofore, to the conflicting and selfish control of local political authorities. But as the problem is after all essentially a peace problem, its solution must be attempted with reference to the normal conditions of commercial intercourse in times of peace. The aspect

of the problem to which this article is directed is whether the federal government should regulate all railroad rates both state and interstate.

LOCAL CONTROL OVER LOCAL AFFAIRS IS ESSENTIAL

It is clear that Congress cannot exercise power over intrastate transportation unless, in order to set interstate commerce free, it is necessary to assume such power. The constitutionality of its exercise depends upon whether such sweeping authority is necessary in order to prevent interruption to interstate commerce.

Congress cannot regulate commerce which is strictly local and which has no effect upon commerce between the states under the guise of the exercise of its plenary power over interstate commerce. The mere fact that the great preponderance of railroad traffic crosses state lines is no justification for the assumption of control over the relatively small amount of traffic which moves between points within the state, unless there is some interference with interstate traffic by reason of the exercise of state authority over this state traffic. It may be illogical and embarrassing for railroads to submit to the vexatious regulations of many jurisdictions; it may be contrary to sound principles of organization to be compelled to take their affairs before several tribunals when one tribunal could fully exercise all the authority necessary to protect the public interests. But our form of government is not based upon the theory of efficiency; it is based upon the theory of democracy, and local control over purely local matters is the very corner stone of democracy. It is with full appreciation of the wisdom of retaining local control over purely local affairs that the writer approaches the subject of exclusive federal control over railroad rates.

NATIONAL CONTROL OVER NATIONAL AFFAIRS IS ESSENTIAL

Under our American form of government it is recognized that certain functions of government, the exercise of which affects the nation as a whole, must be exercised by an authority which represents all the people. The powers delegated to Congress by the several states are therefore the powers which are national in their scope. In granting these powers to the national government, a state surrendered certain control over affairs within the limits of its boundary. Each state, however, gained more than an equivalent

in the freedom from annoyance through a like surrender of power on the part of every other state.¹

Each state surrendered to the federal government the control over those things which affected interstate commerce; it did not surrender control over those activities which did not affect interstate commerce. Therefore the constitutionality of an assumption of exclusive control of all rates depends upon the answers to the questions, (1) does the exercise of the authority of the state over intrastate rates affect, or threaten to affect, interstate commerce, and (2) is the complete control over all intrastate rates by federal authority necessary in order that an effective method may be established for the elimination of state interference with interstate commerce.

HOW LOCAL CONTROL OVER INTRASTATE RATES AFFECTS INTERSTATE TRAFFIC

The effect of intrastate rates upon the movements of interstate commerce is shown by adjudicated cases too numerous even to cite. A reference to the more important of these cases will clearly indicate how the movements of traffic in interstate commerce are directly influenced by adjustments of state rates.

For more than fifteen years the shippers of Memphis, Tenn., have complained that traffic to and from points in Arkansas, which is naturally tributary to Memphis, has been diverted to Little Rock and Pine Bluff, Arkansas, by reason of a low scale of rates put into effect by the Arkansas Commission. In 1905 the Interstate Commerce Commission found that in the case of many articles the disparities in rates are greater than the profits ordinarily made by jobbers.²

Again in 1915 the Interstate Commerce Commission made a thorough investigation of the effect of the state rates in Arkansas upon traffic between Arkansas points and Memphis, and in its findings states:

It is undisputed that complainants at Memphis are actually competing with the shippers located at Arkansas points, and that in many instances the Memphis

¹See masterly address by Alfred P. Thom before the State Bar Association of Tennessee, June 25, 1915, entitled "A Right of the States."

²In the matter of Freight Rates between Memphis and points in Arkansas 11 I. C. C. 180 (1905).

dealer has been driven from Arkansas markets by the competition of the merchants and shippers of that state. The Memphis shippers being excluded from Arkansas on account of these state-made rates, Arkansas shippers and merchants are unduly preferred, while the Arkansas consumer is cut off from the competing Memphis market.³

It seems hardly necessary to refer to "The Minnesota Rate Cases."⁴ There are facts set forth in the opinion in that case which are of striking significance. The state-made rates to the border cities were materially lower than the interstate rates to the cities just over the state line. The Circuit Court found that if discrimination were to be prevented, the reduction of the state rates to Moorhead, Minn., on the Northern Pacific Railroad, would necessitate the reduction in rates on that railroad to Fargo in North Dakota, just over the line, which in turn would necessitate reductions to other points in Dakota, which in turn would in the same way affect rates in Montana, and so on to the Pacific Coast. And yet the Minnesota intrastate traffic on the Northern Pacific, in the year under investigation (1906) was only 2.67 per cent of its entire freight business, and only 5.79 per cent of its entire passenger business!⁵

In 1912-13 the Interstate Commerce Commission made a most exhaustive investigation of express rates and established the so-called uniform zone and block system for all interstate express movements in the United States. After it had been put into effect the same system was submitted to the commissions of all the states and forty states adopted the same system and basis of rates. South Dakota was one of the states which did not adopt it, but instead put into effect rates which were 40 per cent lower than those approved by the federal tribunal and by most of the state commissions.⁶ This resulted in a complaint by commercial interests of Sioux City, Iowa, before the Interstate Commerce Commission, in which it was alleged that Sioux City was at a distinct disadvantage in the markets of South Dakota in competition with the jobbing towns of that state.

³ *City of Memphis v. C. R. I. & P. Ry.*, 39 I. C. C. 256, 263 (1916).

⁴ 230 U. S. 352 (1913).

⁵ *Shepard v. Northern Pacific Railway Co.*, 184 Fed. 765, 776 (1911).

⁶ *American Express Co. v. Caldwell*, 244 U. S. 617 (1917).

The Commission found that:

These differences in rates place a burden on interstate shippers and give a corresponding advantage to intrastate shippers, thus accomplishing an inevitable restriction of shipments in interstate commerce or shrinkage of profits.⁷

It is immaterial what the motive may be for imposing schedules of state rates lower than rates for transportation across state lines under similar circumstances and conditions. If such an adjustment of rates does in fact directly affect interstate commerce, the action of the state authorities is an interference with commerce which the constitution declares shall be subject to federal regulation. But it is not without interest to note the frankly avowed motives of the Texas Railroad Commission to adjust rates in such a way as to check traffic movements from other states in order to build up distributing centers and manufacturing plants within that state. In the celebrated Shreveport case⁸ the Interstate Commerce Commission said:

There appears to be little question as to the policy of the Texas Commission. It is frankly one of protection to its own industries and communities.

It then proceeds to quote from reports of the Texas Commission in which a definite protective policy is declared as the underlying principle in making its rate adjustments. This is set forth and summarized in one sentence by the Texas Commission,

To Texas as a whole it is of the most vital concern that there should be within her limits at proper places jobbing and manufacturing establishments.⁹

And how does the Texas Commission go about this self-imposed duty of fostering home industry by rate adjustments? Shreveport, in Louisiana, has been supplying the markets in eastern Texas. It must be shut out. Therefore rates must be made so low from distributing and manufacturing centers in Texas that the country stores and the consumers will be compelled to trade in the home markets. Generally speaking the Texas rates are about half what the rates are from Shreveport to points in Texas for the same distances—and the Interstate Commerce Commission finds that the circumstances and conditions for interstate and state traffic are

⁷ *Traffic Bureau of Sioux City v. American Express Co.*, 39 I. C. C. 703 (1916).

⁸ *Railroad Commission of La. v. St. Louis Southwestern Ry. Co.*, 23 I. C. C. 31, 35 (1912).

⁹ *Ibid.* p. 35.

substantially similar. For example, if a farmer in Marshall, Texas, wants to buy a wagon he finds that he can send to Dallas, 147 miles away and pay a freight rate of 36.8 cents per hundred pounds, whereas if he buys in Shreveport, which is only 42 miles away, he must pay 56 cents per hundred pounds. Or a man at Longview, Texas, can buy his furniture at Dallas, 124 miles from home, and pay a rate of 24.8 cents per hundred pounds, whereas if he buys in Shreveport, 65 miles from home, he must pay 35 cents per hundred pounds.¹⁰ Such a rate adjustment certainly is as effective as a protective tariff; it directly interferes with the movement of trade through preferential adjustment of transportation charges.

These cases which have been cited are merely illustrative of a situation which exists, to a greater or less extent, in almost every section of the country. Since the Shreveport case was decided in 1912 more than one hundred complaints have been filed with the Interstate Commerce Commission in which it is alleged that state-made rates discriminate against interstate rates. Each state which secures a selfish advantage for its industries through the fixing of low rates simply spurs on its neighbor to seek to conserve its trade to its citizens. Louisiana bitterly complained about the selfish policy of Texas, but it in its turn established a basis of rates which tended to compel its citizens to trade in Louisiana to the disadvantage of industry in Mississippi. Each state seeks to outdo its neighbor in restricting interstate trade.

These illustrations show that the authority of the state over intrastate rates directly affects interstate commerce. The menace is growing more serious each year, and unless effectively checked it will result in serious interference with the right which the citizens of every state have under the constitution to trade freely with the citizens of every other state. This is not a mere technical right—it is a right which lies at the basis of commercial prosperity.

We are drifting back to the intolerable conditions which prevailed under the Confederation, when New York imposed duties on dairy and farm products coming from New Jersey and on firewood from Connecticut; when Connecticut imposed duties on articles imported from Massachusetts; when Massachusetts exacted export duties on calf skins and other commodities, and when almost every state sought to exclude the products of every other state which

¹⁰ *Houston & Texas Ry. Co. v. U. S.*, 234 U. S. 342 (1914).

came in competition with its own products, or to retain its own peculiarly prized products at home. The principal reason for the adoption of the Constitution, as every reader of history knows, was to give to all the people equal commercial opportunities, but today the railroad rate-making policy of many of the states is seriously infringing on those opportunities.

DOES A REMEDY EXIST IN THE POWER OF THE INTERSTATE COMMERCE COMMISSION TO REMOVE DISCRIMINATION?

But it is urged that an ample remedy exists, and that it is going beyond the necessities of the case, and perhaps beyond the constitutional power of Congress, to vest in a federal tribunal all power over all rates, both state and interstate. The Shreveport case¹¹ is cited as authority for this. In that case the Interstate Commerce Commission found that the Texas-made rates were unduly prejudicial to points in Louisiana; that the interstate rates were reasonable. But the Commission had before it the problem of removing the discrimination. What it said about the reasonableness of the interstate rates was largely in the nature of dicta. The Commission clearly indicated that the discrimination could properly be removed by the railroads by increasing the state rates to the basis of the interstate rates. The order of the Commission, which was before the Court, however, simply ordered the discrimination removed, and obviously a discrimination may be removed by reducing the higher rate (in this case the interstate rate) to the level of the lower rate, as well as by raising the lower rate to the basis of the higher rate. The essential part of the order is as follows:

It is further ordered, That the defendant cease and desist from exacting any higher rates for the transportation of any article from Shreveport, La., to Dallas, Tex. . . . than are contemporaneously exacted for the transportation of such articles from Dallas, Tex., towards said Shreveport for an equal distance, as said relation of rates has been found by the Commission in said report to be reasonable.

The carrier is left free to comply with the order in any one of three ways: (1) by raising the lower rates to the basis of the higher rates; (2) by lowering the higher rates to the basis of the lower rates; or (3) by raising one and reducing the other to a common level. The carrier can therefore comply with the order of the fed-

¹¹ *Houston & Texas Ry. v. United States*, 234 U. S. 342 (1914).

eral Commission, and at the same time comply with the order of the state commission by reducing its interstate rates to the basis of the state rates. And in this way the state has forced a basis of rates upon interstate commerce which is lower than the federal tribunal has found to be a reasonable basis. If the carrier chooses, however, to adopt the higher basis on all traffic it at once becomes subject to the interminable litigation such as has grown out of this Shreveport case. This particular case has been in the courts for years and no relief is in sight. The discrimination has existed for more than twenty years.

The Supreme Court in this case lays down the principle that when the Commission finds that a discrimination exists between the interstate and the intrastate rates and that the interstate rates are not unreasonably high the carrier *may* remove the discrimination by increasing the intrastate rates. It is not *compelled* to remove it in that way. There are very practical reasons why a railroad would prefer to follow the easier course of removing the discrimination by reducing the interstate rates. The states have almost unlimited powers over the corporations which receive their charters from the states. Except in a comparatively few cases the charters are subject to amendment and repeal. By antagonizing the state authorities the railroad places itself in a difficult and almost impossible position. There may not be serious danger of the repeal of a charter, but there is menace of amendment. Moreover if the railroad desires an extension of powers it is seriously embarrassed by its disregard of the state laws. A striking instance of this is afforded by a conflict of authority which arose in the state of New Hampshire.¹² In 1883 the legislature passed an act authorizing the consolidation of railroads provided rates should not be raised on the lines thus consolidated. The Boston and Maine Railroad raised its rates. The state court held that the statute applied to interstate rates as well as to state rates, and injunction proceedings were begun in 1907. The railroad asked the legislature to repeal the statute. For ten years there was litigation before the courts, hearings before the Public Service Commission, and appeals to the legislature, and it was not until 1917 that the statute was amended, and

¹² See reports of New Hampshire Public Service Commission beginning with Volume I (1911) to date.

then only to the extent of giving to the Public Service Commission the same power over rates that the legislature had claimed. In other words the judgment of an expert tribunal has been substituted for the inflexible barrier of statutory restriction. But the state has not relinquished its claim to control interstate rates. It would not be asserted that the state could fix interstate rates against the protest of the railroad nor that it could compel a reduction in interstate rates, nor restrain the railroad if it should file a schedule of such rates which did not meet the approval of the state commission.

But the assertion is made that the railroad can comply with the state statute by *refraining* from filing all such schedules. In 1913 the Interstate Commerce Commission investigated the subject of rates on the Boston & Maine Railroad and found that an increase in rates was necessary. But the control which the state of New Hampshire claimed to have over interstate rates prevented any effective adjustment of rates without the consent of that state. As prompt action was necessary the Interstate Commerce Commission, through Commissioner C. A. Prouty, and the State Commissions of Maine, Vermont and Massachusetts, as well as of New Hampshire, through which states the Boston & Maine Railroad runs, agreed that the rate adjustment should be worked out by the Public Service Commission of New Hampshire.

In the report of the Conference of State Commissions, presided over by Commissioner Prouty, the following significant statement occurs:

The commission of New Hampshire under the peculiar circumstances obtaining in that state, must approve rates before they can be established.

When the Boston & Maine leased the roads located in New Hampshire the legislature of that state provided that the leases should be upon condition that no advance in rates, either state or interstate, should ever be made. Subsequently advances were in fact made and proceedings were begun attacking these advances. The Supreme Court of New Hampshire held that the obligation not to advance rates was binding upon the Boston & Maine even as to its interstate charges. Assuming that this decision is wrong as to interstate rates, and that the Boston & Maine might, notwithstanding the condition upon which these leases were taken, advance its interstate transportation charges, still it is evident that to do so might avoid the leases themselves and therefore disrupt the Boston & Maine system. As a practical matter, therefore, the condition is obligatory. The legislature of New Hampshire, recognizing that possibly in justice to this company its transportation charges should be increased, has provided that the

commission of that state may permit such advances, but that no advances shall be made until they have been affirmatively sanctioned by that body.

It results, therefore, that the Boston & Maine can advance no rates, either state or interstate, which apply within the limits of the state of New Hampshire without the approval of the Commission of that state.¹³

This situation illustrates not merely the extent to which a state may embarrass a railroad in the adjustment of its rates, but the helplessness of federal authorities, when, as a practical matter, it becomes necessary to increase rates. There is no doubt that the federal government has the power to regulate the interstate functions of carriers, but here is an instance where the federal authorities recognized the practical necessity of deferring to the state authorities and of permitting them to establish the standard of reasonableness of all rates, and thus to establish the standard of service.

THE NATION SHOULD DETERMINE THE STANDARD OF NATIONAL SERVICE

If the supreme authority over interstate rates thus finds itself embarrassed, how can it be expected that a railroad, which may derive all its corporate rights from a state, will feel free to ignore the mandates of the state even though legally permitted to do so? In order that regulation may be effective the federal authority must leave to the railroad no alternative but so to adjust its rates as to conform to the standard of reasonableness as determined by that authority. Under the law as it exists today the railroad has the alternative of conforming rates to meet the ideas of reasonableness of the state or of the nation. This means that if the nation establishes a standard of rates to meet its conception of the standard of service, the railroad may ignore such standard and adapt its service, both local and national, to conform to the ideas of the state authorities. This follows from the fact that there is no absolute standard of reasonableness of rates.¹⁴ If there were such an abso-

¹³ 4 N. H. P. S. C. Rpts., p. 89 *et seq.*; also 1 Mass. P. S. C. Repts. 92.

¹⁴ That there is no absolute standard of reasonableness is recognized in the late case of the *American Express Company v. Caldwell*, 244 U. S. 617, where the court says:

"But the finding that discrimination exists and that the interstate rates are reasonable does not necessarily imply a finding that the intrastate rates are unreasonable. Both rates may lie within the zone of reasonableness and yet involve unjust discrimination."

lute standard, then unquestionably the standard as determined by the national authorities would have to prevail in all national transportation. If a schedule of rates escapes confiscation—that is, if it yields a fair return upon the value of the property—it cannot be set aside by any court. But such a standard of rates may be entirely inadequate to give to the public a service which the public demands or which the national authorities deem necessary for the national needs. The national authorities may deem it necessary that railroads should increase their trackage, enlarge their terminals and provide additional equipment; the state authorities may regard the present facilities as adequate. The national authorities establish rates which will give to the railroads sufficient credit to enable them to raise the money for these extensions and improvements; the state authorities refuse an increase in rates on the ground that the present rates yield a fair return and that it is not necessary to increase facilities, and thus increase rates. The standard of rates determined by the federal authorities is reasonable from the point of view of the nation; the standard of rates determined by the state authorities is reasonable from the point of view of the state. If in consequence of these two standards discrimination exists against interstate traffic, under the law as it stands, the railroad may adopt either standard. Such an option ought not to be given. It should not be in the power of the railroad which seeks to avoid the ill will of the state to deprive the nation of that standard of transportation which it desires.

There is a fundamental reason why two standards of rates, and consequently two standards of service, cannot be maintained. If the nation establishes one standard and the state establishes another standard, with rates adapted to meet the two standards, the state in its transportation nevertheless uses the facilities which are employed in interstate transportation. There cannot be separate trains or separate cars or separate roadbeds, and if the nation establishes one basis the state gains the benefit of such standard without contributing its fair share to its maintenance. The state which is satisfied with a low standard of service profits at the expense of other states with higher standards of service, and at the expense of all those who ship in interstate commerce.

INTERSTATE COMMERCE COMMISSION CAN INVESTIGATE ONLY THE RATES COMPLAINED OF

The inadequacy of the remedy, which is directed simply against unjust discrimination, is further illustrated by the limitations under which the Interstate Commerce Commission acts. It can direct its investigation only against the rates complained of. In the *South Dakota Express* case¹⁵ the complaint was directed to the discrimination against shipments from Sioux City, Iowa, and the Express Company had authority under order of the Commission to change only the rates applicable to Sioux City, although the same discrimination existed throughout that territory. The effect of the order was to place that city in a preferential class and thus in reality to accentuate the discrimination. The *Illinois Passenger Case*,¹⁶ recently decided by the Supreme Court, affords striking illustration of the inadequacy of the present remedy. A rate of two cents a mile was established by the Illinois Legislature. The interstate rate was two and a half cents a mile. Under these rates the fare from Chicago to East St. Louis, Illinois, was \$5.62, and to St. Louis, Missouri, only nine miles farther, \$7.50. The Commission found that a discrimination existed and that 2.4 cents was a reasonable rate for both classes of traffic. The railroads attempted to put in force a 2.4 cent rate throughout Illinois, but the court held that it could do this only as to those points which had been the subject of the complaint.

INTERSTATE COMMERCE COMMISSION MUST COMPLY WITH THE REQUIREMENTS OF DUE PROCESS OF LAW

Furthermore, the investigation must be conducted in such a way as to conform strictly to the constitutional requirements of due process of law; that is, a public hearing must be held, of which all parties in interest must be notified, evidence must be received, and the finding based on the evidence, and only upon the evidence offered at the public hearing.¹⁷

Even if the carrier had the power to initiate a complaint before the Interstate Commerce Commission, based upon alleged dis-

¹⁵ *American Express Co. v. Caldwell* (*supra*).

¹⁶ *Illinois Central Railroad v. Public Utilities Commission* (Jan. 14, 1918).

¹⁷ *Interstate Commerce Commission v. Louisville and Nashville Railroad*, 227 U. S. 88 (1913).

criminatory state-made rates, it would be compelled to try out that issue under the forms of judicial procedure, involving indeterminate delay, because of the necessity of a judicial determination by the Commission. If the Commission had the exclusive power over all rates, the carrier could adjust its tariffs so as to remove the discriminations, and the rates would become effective after the Commission had given its approval. There would be no necessity for a judicial trial. Before the amendment of August 9, 1917, the rates would become effective, unless suspended by the Commission; under that amendment they become effective "after approval thereof has been secured from the Commission." In other words, the Commission acts in a strictly administrative manner, issuing no order and making no judicial determination, but exercising its judgment as an expert body especially charged with the protection of the public interests.

RATES INEXTRICABLY INTERWOVEN.

An important practical reason why there should be a single control over rates is because rate structures are the most delicately adjusted mechanism. A change in a single rate may compel changes in thousands of rates in order to meet competitive conditions or to prevent discrimination. What has been said about the effect of state-made rates in Minnesota illustrates this. A most striking instance of the effect of the change in a single rate upon many rates is afforded by a case recently heard before the Public Service Commission of Pennsylvania.¹⁸ This case has not yet been decided but the facts are taken from the testimony submitted. A complaint was filed attacking the rate on coal from Pittsburgh to Philadelphia. There are in Pennsylvania, West Virginia, Ohio and Indiana, numerous districts producing coal which is sold by the operators in competition with each other. Coal may move from the same district over competing railroads. The marketing and transportation of coal therefore are highly competitive. A reduction of 15 cents a ton from Pittsburgh to Philadelphia was asked by the complainants. It appeared in testimony that such a reduction in this rate would compel reductions from practically all coal districts in the states mentioned on account of the exceedingly intricate competitive situation, and that the railroads would lose a revenue of ten million

¹⁸ *Pittsburgh Coal Operators v. Penna. R. R. Co.*

dollars a year if this slight reduction were made in a rate between two intrastate points.

RATES MUST BE ADJUSTED WITH REFERENCE TO THE STANDARD OF SERVICE

Before the war the shipping public came to a realization that the important thing about transportation was adequate service. The railroads contended that they could not give the kind of service which the public demanded upon the basis of rates permitted by public authorities; that they were forced to economize in order to meet expenses and have some return for their stockholders; that the impairment of their earning power affected their ability to raise money for improving their facilities. Today, in time of war, there is only one demand—and that is to transport freight and passengers with promptness. Shippers even are begging the public authorities to grant increases in rates so that the railroads may properly perform their functions. To what extent the failure of the railroads is due to subjection to many masters it is not necessary to discuss. But the one thing which stands out clearly is that transportation is a national necessity and that there can be no different standards of services terminating at state lines. Federal authority must determine the standard, not only to meet the demands of national commerce in time of peace, but in its supreme responsibility to protect and equip the nation in time of war.

If this responsibility of determining the standard of transportation is national, then the power to regulate the revenues which are the only means of effecting the standard must be national. As facilities employed in intrastate transportation cannot be separated from the facilities employed in interstate transportation, the burden of maintaining the one must be the same as the burden of maintaining the other, and the burden and the incidence of the burden must be determined by the supreme authority.

The rate question is usually discussed by the public authorities as a thing to be determined by reference to about everything except that to which it is most related; namely, service. There are labored discussions as to whether a schedule of rates will yield a certain per cent upon an engineer's estimate of what it will cost to reproduce the property. That is something which concerns merely the protection of the private rights of the owners of the property—

it does not help in the slightest to protect the public in its right to an adequate service. There are elaborate computations which purport to give the cost of particular kinds of service. Such computations, made upon hypotheses which reflect merely the accountant's guesses or economic theories, are valueless in determining an adequate rate.. Rates in one section of the country are compared with rates in another section, but no thought is given to the kind of service required in the different sections.

The result is that many tribunals acting upon as many theories of rate making determine standards of rates which tend to produce as many standards of service—not consciously, for rarely do they give any consideration to the supreme transportation function of service, but as a necessary result of fixing revenues to meet the theoretical ideas of what are, *per se*, reasonable rates.

To SUMMARIZE: Service is national. The standard of service must be determined by the national authority. That standard cannot be made effective without the necessary revenues, and the amount of such revenues must be determined by the same authority which sets the standard of service. As the Supreme Court said in the Shreveport Case (*supra*):

It was recognized at the beginning that the Nation could not prosper if interstate and foreign trade were governed by many masters, and, where the interests of the freedom of interstate commerce are involved, the judgment of Congress, and of the agencies it lawfully establishes must control.

HOW COULD NATIONALIZATION OF RATE REGULATION BEST BE ACCOMPLISHED?

BY MARTIN S. DECKER

A nationalization of all railroads in the United States, including the regulation of rates and all practices affecting rates, was accomplished on December 28, 1917, under proclamation by the President of the United States. All loyal citizens recognize the necessity of the act and admire without qualification the bravery of the action.

On that date the Interstate Commerce Commission and every state railroad commission temporarily ceased to exercise independent administrative or executive functions over the railroads of this country. They became subordinate investigating bodies, entirely subject to the superseding administrative and executive powers vested in the Director General of Railroads.

No order of any commission, federal or state, has today any binding force in law except with the consent of the Director General of Railroads; and any such order, if allowed to take effect and have application, may be suspended or nullified, with or without formal notice to the commission or any affected party, by action or authorization of the Director General. There is therefore no longer any real regulation of railroad rates by established tribunals throughout the United States.

Whatever rate regulating functions the Interstate Commerce Commission shall continue to exercise during the war will be in the main ancillary to governmental requirements, whether primarily arising because of wage increases or greater cost of railroad material, or because of the need for increased earnings from railroad operation to reach as far as practicable the measure of net earnings fixed by the government guarantee that they shall equal the average of net earnings for the past three years. It is clear of course that the state commissions will prefer to coöperate with the federal authority and not attempt unavailing antagonism to the provision of revenue deemed necessary for governmental railroad requirements by the Federal Railroad Director.

The public interest which the railroads of the country must now almost exclusively serve is that which pertains to the conduct and

winning of the war. The public interest in the enforcement of common right to the movement freely by railroad of all freight and passenger traffic as commerce between localities, without wrongful prejudice to persons or places, and with all reasonable service rendered by the railroads at just and reasonable charges, which has been in peace times the great underlying purpose of the granted monopoly of railroad service to common carrier corporations, is to-day relegated by necessity to the extreme rear of the great procession of considerations which constitute problems for quick and right solution under the paramount needs of the nation at war.

It is mere sound to say that "we have rushed into a definite policy of government acquisition and operation of railroads for the commercial benefit of the people." We have done no such thing. The railroads have been taken over "by the war, of the war, for the war." This has been specifically stated by the President in his proclamation and in his following speech upon the same subject before the Congress.

All tests hitherto applied in railroad regulation have been submerged in the great ocean of war necessity. That is today the great test under which regulation must be applied in practice during the war. Mere public service, as distinguishable from the many forms of war service, can only be crumbs that fall from the table of major railroad war operations. Every railroad rate regulation order sought to be applied by any railroad commission during the war must properly be construed as bearing the prefix, "*If the Director General of Railroads shall approve.*"

Think of it how we may, we come always to the great outstanding, unchangeable fact that the railroads of this country are operated today under requirements and prohibitions which correspond to martial law. No man or company can raise the sign "Business as Usual." That word "usual" has been changed to "possible." Men and corporations engaged in business of any description are now greatly concerned in securing transportation of their material and their agents upon any terms; they have little immediate concern with the price they have to pay for that transportation. It is not too much to say that regulation of railway rates, as we have commonly applied the term to fit normal business and normal commerce and to prevent discriminations and unjust rate exactions as affecting individuals, localities and kinds of traffic,

has become, in this disrupting war time, almost a moot question. At any rate the subject does not present in these sacrificial days any large practical question for urgent immediate solution.

But this gives us a wonderful opportunity to realize our sins of the past and prepare for a sinless future with respect to railroad operations and railroad regulation. In making that preparation let us cast aside the idea of adopting for peace times the government ownership of railroads, or of continuing in peace times the government operation of railroads which has been found necessary solely for war purposes. We are now undertaking a forcible temporary government lease of United States railroads upon a stated net earnings basis—a lease which could not be effected in peace times, and the mere announcement of which as having been proclaimed, but by no means consented to in legal form by the railroad owners, carries no solution in and of itself and projects no title in the lessee beyond the necessary occupation of the properties for war purposes.

It is difficult to understand how enlightened intelligence can predict any other result from ultra expensive war time operation by the government than a large deficit of net earnings below the proposed net earnings rental basis. Nor can the experience of such war time operation supply a sound basis of computation upon which to take over the railroads for peace time operation by the government either as owner or lessee. Moreover, that great body of men who produce and buy and sell, who ship and reship the raw material and the manufactures which in myriad forms constitute the commerce of the country, will not be satisfied to trade the present legal responsibilities and obligations of common carrier corporations and the developed system of government regulation, both at common law and by statute, and as settled by the courts, for the arbitrary and practically unassailable rules, regulations and methods of government operation, theoretically controlled as they may be by general statutory provisions. For whatever may be said, under any system of government operation the elements which compose and control the government policy must have first consideration in all regulations, while under private ownership the railroad operations are required to be conducted always with first regard to the paramount public interest and rights of those whom the owners, in return for the public grant, have undertaken to serve. For example, there is no real federal common law. Shall we cast aside the multitude of

rights now existing at common law as against railroads in the mere hope that the government will voluntarily observe them? Again, have we any ground for believing that a government operated railroad system in peace times will more readily respond without penalties to the rate or service requirements of a shipper or section of the country than a railroad corporation will with regulations applied under penalties for non-observance? We who submit, with or without protest, to the frequent poor service of the mails, which is only a single service, will answer "No" for the complicated services and rates involved in the carriage between thousands of localities of so many thousands of commodities and for the competitive interests of millions of shippers and consignees. And then we cannot disregard the blight which could be cast upon commercial interests as well as the whole public interest under the political influences that may so insidiously control not only the railway operations but also the elections through this control of the railways.

In preparing for the future we must still look forward to regulation, but it should be a new regulation. We must first realize that the old regulation of rates and practices affecting rates has failed. We see now as a nation of individuals what was perceived before by only a small class of individuals, that the revenues of the railways have not been sufficient, as a whole or for most roads individually, to pay the frightful increases of operating costs and yield sufficient in net earnings, after reasonable dividends, to permit the carrying of considerable balances each year to surplus for application to the cost of necessary future additions to lines, yards, terminals, and equipment or other contingent corporate purposes. Of course the result has been a limitation upon railway credit. Large discounts have been borne in the sale price of railway securities, and there has been restriction of all railway betterments and additions to those imperatively required at the time or in the time immediately to follow. The cost of money for the capital purposes of the railways has been extreme. The cost of floating short term notes to pay current debts or temporarily to meet maturing bond or note obligations has gone many points beyond the ordinary, sometimes termed legal, interest for loans. And the subsequent taking up of these notes, or directly of maturing bonds, by long term bonds has often required the issue of bonds largely in excess of the face value of the securities to be funded, so that many and often large excess issues, as well as

discounts, have here again been involved. This has not meant arbitrary exactions by bankers. It has meant that the sale credit of the railways for their securities has been low as compared with other offerings in the financial markets at the same times. The railway corporations have had to take on these extraordinary debt burdens and they represent in a real sense part of the cost of the property. The rates of the companies have not been sufficient in most cases to admit of the amortization of these extraordinary debt burdens and charges, to meet the current requirements of general debt charges and to give some proper return to the stockholders.

We have been blissfully oblivious to the facts that every railway company must constantly add to its facilities in order to serve economically the growing demands for service; that nevertheless every few years there comes a period of traffic recession, sometimes a long period, when many cars and engines are idle and much terminal space is empty; that in other years every facility and terminal of the railway are strained to the uttermost use, and are inadequate to supply the public with the service then demanded. A prudent manufacturer with part of his factory or equipment idle in recurring periods would in some way charge into his expenses or against his corporate income for the year the average profits lost through non-use in the idle period of part of the factory or equipment. He would fix his prices to make up for his losses in dull periods to the fullest extent possible. No such prudent consideration has been taken into account in dealing with the railways.

We have failed to realize to the full that the railway business of the United States is the biggest business on earth; that its main purpose is to serve all other business; that it is in essential respects a part of all other business and must be conducted upon business principles if it is to be successful.

All rate regulations affecting the amount of general railway rates has proceeded upon the idea of necessary restriction and without assumption of the duty of railway protection. An exception is the prohibition of rebates and passes, although it was intended primarily to prevent discrimination against the individual railway patron and not for any declared purpose of protecting railway revenues. There were indeed many who claimed the prohibition was an attack upon the ability of the railways to get the greatest amount of revenue. Unquestionably that prohibition has cut off favoritism

to selected shippers and industries, stabilized rates and fares, benefited all shippers as a class and all railways as a whole. No voice is now raised anywhere in favor of the old vicious rebate and pass system.

We now see plainly that the regulation of railway rates must extend to full protection of the railway business in order to insure the full rendering of railway service to the public at all times and under all conditions. If the Interstate Commerce Commission had been charged with the duty of requiring needed railway improvements fifteen years ago, together with the correlated function of efficiently regulating the capitalization of the railways, the discharge of those great duties would doubtless have brought to the Commission a responsibility for necessary protection that would have been strongly evident in recent years in determinations involving proposed increases of rates.

The President's great sentence that "The world must be made safe for democracy" went ringing through the nations and is still thrilling the hearts of men. His proclamation taking control of the railways that they might be made into a single system to serve efficiently and help save this democracy in war time has shown us our opportunity to let or make the railways save themselves for public service in the coming time of peace. The 262,000 miles of railway in this country now constitute a single system. Why not give the railways authority in law to operate as a single system in peace time so far as service needs may require? When the railways go back to their owners for operation let them be returned with statutory direction to continue operations as a single system in whatsoever ways economy consistent with good and sufficient public service shall demand. That would be real national regulation affecting rates as well as service. Let us erase the anti-trust laws from the statutes so far as they apply to railways, and repeal the anti-pooling section of the Interstate Commerce Act. Let the railways pool their earnings and their equipment as well. Let us even, in the public interest for real efficient service, direct them by statute to form and operate an over-lying equipment company, by which needed equipment can be had by any road sufficient to meet all traffic demands at all times, and can be returned when the need has passed. Not only let them, but, if good operation demands, make them, use yards and terminals and even tracks in common. Let us strike the shackles of restraint

from all railway progress towards continuously efficient public service. In short, legalize railway combinations and railway pooling under adequate government control, which control should include service as well as rate regulation and the ordering of improvements to railroad property with supervision of all new capitalization. These old prohibitory anti-trust laws and anti-pooling laws were never necessary in railway regulation. They are now opposed to the sentiment of the time and they have always made the service of railways more costly to the people. Competition has no place in public service. The public can be well served only by the combined and directed energies and resources of all public servants having like duties to perform.

It is not generally remembered that a legalized pooling bill passed the House of Representatives about the year 1895, and failed of passage in the Senate because of the approaching close of the session. This was after passage of the Sherman Anti-Trust Law, which was enacted in 1890. If the legalized pooling bill had become law, the anti-trust law would not have had further application to railroads. Twenty-three years ago we came near realizing in law-making that which it is apparent we must do in the present railroad crisis—recognize that these interlacing rail lines carrying the products of every market into every other market must be regarded in law as well as in fact as the American railroad system, to be operated in common service for the public use. Every railroad is a monopoly connected and used with every other railroad as a general railroad monopoly. What a paradox it is to say that such a necessary monopoly shall be subject to an anti-monopoly law! Today the government is itself a railroad monopoly because anti-monopoly laws have made the railroads unable to cope with the great problem of efficient war time service.

The answer to the title of this paper is plain: mere regulation of railway rates of a repressive character has failed. With anti-trust laws and anti-pooling restrictions in force many large economies of operation have been impossible. Contracts between the carriers to enable use of the roads as a single system in the better and economical service of the public have been forbidden by law. Guarantees of traffic to weak roads have been unlawful. The stress of traffic upon strong roads has broken down their efficiency. It is not enough that the Interstate Commerce Commission shall *permit*

increases in rates from time to time to some or all railroads. The nationalization of railway rate regulation should provide for orders by the Interstate Commerce Commission *requiring increases*, as well as decreases, of railroad rates. The whole viewpoint of our regulating traditions must change. The regulation of rates should be based upon a required high grade of service, not upon any grade of service. The regulating authority should have power to require that high grade of service and the property improvements requisite thereto. The regulating authority should have power to pass upon the issues of railroad securities and restrict such issues to railway capital purposes. There should be a Federal Railroad Loan Bureau, as there is today a Federal Farm Loan Bureau. As to railroads, the anti-trust and anti-pooling laws should be repealed and railroad combinations and railroad pooling, under supervision and restriction by the Interstate Commerce Commission, should be legalized. The investigating powers of the Interstate Commerce Commission should be constantly employed with a view to determining whether particular classes of railroads are charging rates high enough, under traffic conditions from time to time prevailing, to enable them to discharge at all times their charter obligations to render sufficient and good service to the public; and if not, the issuance of orders directing revision of rates upward, and the kinds of traffic to which they should apply, should follow. This would be nationalization of railway rate regulation for the national welfare, and in the light of recent events it is plainly the best way that it can be accomplished. The railway rate adjustments as between sections and localities and kinds of traffic would go on of course and be regulated as heretofore.

More and more the development of railway regulation has indicated that efficient regulation means full railway supervision, but that such supervision must be beneficent, and in no sense a response to attacks upon railway capital required for maintenance and continuous improvement of railway property to make it always adequate for the public needs. Such supervision must base its action upon facts, and whenever so based the people will sustain and commend it.

The railroad companies have been rightfully complaining of state regulation of railway capitalization, not because regulation of railway capitalization is oppressive or unjustified, but that, while recognizing its merits, large systems extending through several states

ought not be subjected to separate regulation in this important respect by several independent governmental agencies; and that capitalization regulation of all interstate lines should be done by the single governmental authority which in other respects regulates interstate roads. The indictment so framed is sound, and state commissions themselves find no real objection to federal assumption of the duty of regulation, if a real and efficient system of capitalization regulation by the national government shall be established to apply to roads physically constructed across state lines.

The railroad complaint against state regulation of interstate rates stands upon quite another basis. There probably are constitutional difficulties in the way of complete assumption by federal legislation of the authority now exercised by the states over rates applying to transportation wholly within the states. The United States Supreme Court has consistently held that state legislation, whether fixing service hours for railway men, or requiring safety devices on railway cars, or prescribing maximum rates to apply within the state, and done directly by the legislature or by a commission created by the legislature, is void to the extent that it conflicts with regulation that has been lawfully applied by the federal government. If the new system of regulation suggested in this argument shall be fully provided, if the new rate regulation shall be based primarily upon required sufficient and good service to be shown first, or otherwise to be ordered, and if rates shall be adjusted first upon that prerequisite, with reserved resources provided by the roads always to meet extraordinary demands, it seems certain that such overshadowing regulation by the federal authority would speedily bring all state commissions into active coöperation with the new federal methods of regulation. The larger present need is to revise completely the national system of rate regulation and see what follows, rather than to waste energy now in arguing against state regulation of state rates which in some states is much more advanced along the lines here advocated than the present federal system of regulation. It is noted, moreover, that both the Interstate Commerce Commission and the state commissions have lately shown a most commendable coöperation in rate regulation matters, which ought to and would be fostered, and extended probably to all important matters, under the reforms in regulation here proposed.

Regulation of railways seems to be subject to important changes

about every ten years. Beginning with 1887, when the Act to Regulate Commerce became effective, we find that in 1897 the United States Supreme Court held that the Interstate Commerce Commission had no power to prescribe maximum rates; that in 1906, the Hepburn Act was passed giving the Commission that power and many other powers; and in 1917 came the war order taking over the railroads into government operation during the war. This would now seem to be the time to place federal regulation of rates upon a high service basis, since a high service basis is imperative if the tremendous commerce of the country which will require transportation after the war is to be well served.

The nationalization of railway rate regulation can best be accomplished by revision of the federal system of regulation to require the provision of continuous high efficiency of railway service; the fixing of rates to enable that high efficiency service always to be provided as a standard condition with all due allowances in rates for fair profits and necessary future improvements to railway property; the supervision of railway security issues; the marketing of railway bonds at fair prices; the compulsory expenditure of capital by the railways from time to time for property additions if not voluntarily undertaken; the legalization of railway contracts for combined and economical operations.

Successful regulation of rates must embrace all of these elements. If they should be incorporated into the system of national regulation, it will merely be the application of business principles to the world's greatest business. There will then be no complaint of over-regulation by carriers, although they will be more extensively regulated. There will then be little complaint by shippers against the amount of rates, because of satisfaction with the service and because with rates once adjusted under these conditions the operating economies with lowered cost of railroad loans will tend to cause reductions rather than successive increases in railway charges. The new system should be a constructive rate regulation, embracing at once all necessities of carriers in doing their work and the rights of the public in having that work well done,

LEGAL QUESTIONS INVOLVED IN NATIONALIZATION OF RATE REGULATION

BY WILLIAM E. LAMB

Any plan placing railroad rates under complete federal control will arouse discussion as to the power of Congress on the one hand and the rights of the states on the other. While the discussion may assume various forms and appear to cover numerous questions, yet all are included in one—the power of Congress to enact legislation that will completely nationalize rate regulation.

Since the decision of the Supreme Court in the Shreveport case,¹ the adherents of nationalization insist that the power of the federal government has been fully determined, and national regulation in the fullest sense is but a matter of choice in the form of the law. The opponents, however, vigorously deny that Congress possesses the necessary power and advance numerous reasons in support of their position, most of which, however, relate to the extent to which the federal government has exercised its powers in past or present legislation. In a measure they present questions of construction rather than questions of power. They directly challenge the federal power by asserting: (1) that each state has the absolute power to determine the amount of each rate to be charged for rail transportation between points within its borders; (2) that a transfer of that power is essential to complete federal control, which would require a constitutional amendment; (3) that the enforcement of the act to regulate commerce in harmony with the decision in the Shreveport case would result in a violation of the due process clause of the fifth amendment, a question not considered in the Shreveport case.

VIEWS OF OPPONENTS OF COMPLETE FEDERAL CONTROL OF RATES

As an analysis of that case appears in a previous chapter, it seems more appropriate first to present the views of the opponents of complete federal control, including without distinction those re-

¹ *Houston, East and West Texas Railway Company v. United States*, 234 U. S. 342.

lating to erroneous construction with those which assail the federal power.

It is claimed that the power of the states to legislate concerning their internal commerce is as full and complete as the power of the federal government, covering the field of interstate commerce which was clearly recognized and declared in all of the decisions of the Supreme Court, commencing with *Gibbons v. Ogden*² and ending with the Minnesota rate cases.³ The statements in various decisions, as to lack of power in a state to enact legislation affecting interstate commerce, are said to have been aimed at state legislation which by its terms extended beyond the territorial limits of the state, though not including the resultant effect that legislation confined solely within the borders of the state might possibly have upon outside economic, commercial or transportation conditions. In *Gibbons v. Ogden*⁴ the legislation considered directly regulated interstate commerce, and was not confined to commerce solely within the state, and it is said that Chief Justice Marshall's statement that the power of the federal government extended to all external concerns of the nation, and all internal concerns affecting the states generally "but not to those which are completely within a particular state which do not affect other states and with which it is unnecessary to interfere," must have referred to state legislation which by its terms extended beyond its boundaries.

The right of states to fix the charges of public service corporations was challenged in *Munn v. Illinois*.⁵ It was claimed that the regulation applied directly to interstate commerce, as in the ordinary course of trade the grain from a number of states would pass through the elevators at Chicago, the charges therefor having been fixed by an act of the Legislature of Illinois which was assailed in the suit. The Court held that the act was not a direct attempt to regulate interstate commerce and called attention to the familiar rule that even though there might be indirect regulation of interstate commerce, until Congress had entered that field the power exercised by the state was not unlawful, and further stated that under the facts in the case there was no interference with interstate

² *Gibbons v. Ogden*, 9 Wheat. 1.

³ *Simpson et al. v. Shepard*, 230 U. S. 352.

⁴ *Gibbons v. Ogden*, 9 Wheat. 196.

⁵ *Munn v. Illinois*, 94 U. S. 113.

commerce. The decisions involving the regulation of railroads within the states, decided about the same time, of which *Chicago, Burlington & Quincy Railroad Company v. Iowa*⁶ and *Peik v. Chicago & Northwestern Railway Company*⁷ are illustrative, indicate, so it is said, that the references in the several opinions to the reserved power in Congress applied to legislation which in form affected interstate commerce, but as to which Congress had not yet legislated, especially as the decision in the Peik case covered legislation of the State of Wisconsin establishing rates on traffic originating therein but destined to points outside, which the court held valid because Congress had not exercised its power as to transportation of that character.

Following these decisions there was general legislative activity on the part of the states providing for more complete state regulation of railroads. The statutes from time to time came before the court for construction, and in *Stone v. Farmers' Loan and Trust Company*⁸ the court reiterated the doctrine that "the state may beyond all question by the settled rule of decision of this Court, regulate freights and fares for business done exclusively within the state, and it would seem to be a matter of domestic concern to prevent the company from discriminating against persons and places in Mississippi." These statutes did not by their terms extend to transportation or commerce outside their respective borders, but in *Wabash Railroad Co. v. Illinois*⁹ the court declared an act of the legislature of that state, which actually covered transportation both inside and outside the state, to be valid, because the highest court of the state had construed the law to apply only to transportation within the state, but added that without such construction by the state court the act would have been a direct regulation of interstate commerce which the state was without power to enact, even though Congress had not undertaken to legislate on the subject. The doctrine of the Peik case, *supra*, which had evidently misled some of the state legislatures was thus repudiated.

⁶ *Chicago, Burlington and Quincy Railroad Company v. Iowa*, 94 U. S. 155.

⁷ *Peik v. Chicago and Northwestern Railway Company*, 94 U. S. 164.

⁸ *Stone v. Farmers' Loan and Trust Company*, 116 U. S. 307-334.

⁹ *Wabash, St. Louis and Peoria Railway Company v. Illinois*, 118 U. S. 557.

A long line of cases¹⁰ involving the rights of states to fix rates followed the Wabash case, and in each the power of the states was in question, and in each it was decided that the action of the states did not cast a burden upon interstate commerce. It is now claimed that it was never suggested that Congress might possess the power to determine the amount of a rate for transportation between points wholly within a single state until the decision in the Minnesota rate cases. In that case, it is said, that no doubt was entertained at the time of the decision in the Wabash case, *supra*, as to the rights of states to regulate transportation that was wholly within their respective borders,¹¹ and after discussing the decision in that case this language appears in the opinion in the Minnesota rate cases: "The doctrine was thus fully established that the state could not prescribe interstate rates but could fix reasonable intrastate rates throughout its territory."¹² It is further stated that the power of the state to fix reasonable intrastate rates extends not only throughout the state but to cities adjacent to its boundaries, and in exercising that power it is not bound to adjust its rates to correspond with the interstate rates established by carriers.¹³ The Court then states that if there is a restriction on state authority it must be by virtue of the paramount power of Congress over interstate commerce and its instruments.¹⁴

It is further said by the opponents of federal control, that in the Minnesota rate cases it was expressly decided that Congress had not, in the Act to Regulate Commerce, undertaken to interfere with the powers of the states to fix rates within their territorial limits,¹⁵ although the court did say that discrimination as between state and interstate rates could only be determined by the Interstate

¹⁰ *Dow v. Beidelman*, 125 U. S. 680; *Chicago, etc. Railway Company v. Minnesota*, 134 U. S. 418; *Chicago, etc. Railway Company v. Wellman*, 143 U. S. 339; *Reagan v. Farmers' Loan and Trust Company*, 154 U. S. 362; *Reagan v. Mercantile Trust Company*, 154 U. S. 413; *St. Louis and San Francisco Railway Company v. Gill*, 156 U. S. 643; *Smythe v. Ames*, 169 U. S. 466; *Minneapolis and St. Louis Railroad Company v. Minnesota*, 186 U. S. 257; *Alabama and Vicksburg Railroad Company v. Mississippi*, 203 U. S. 496; *Northern Pacific Railway Company v. North Dakota*, 216 U. S. 579.

¹¹ 230 U. S. 415.

¹² 230 U. S. 416.

¹³ 230 U. S. 416-417.

¹⁴ 230 U. S. 417.

¹⁵ 230 U. S. 423, 431-432.

Commerce Commission. It is said that this statement, however, is not significant when it is borne in mind that until the decision in *Baltimore & Ohio Railroad Company v. United States*, ex rel. *Pitcairn Coal Co.*,¹⁶ it had been generally believed that the act to regulate commerce permitted courts to pass upon the question of discrimination, and such power had been generally exercised by them. The lower court in the Minnesota rate cases had specifically held that the state-made rates discriminated against interstate commerce and the observation of the Supreme Court of the United States as to the original jurisdiction of the Interstate Commerce Commission to pass upon that question appears to have been an answer to the claim of power on the part of the lower court.

The foregoing in a general way covers the claims of the opponents of complete nationalization of rate regulation regarding the powers of the federal and state governments up to the time of the decision in the Shreveport case, which either overruled the previous decisions of the Supreme Court, or resulted in erroneous construction of the Act to Regulate Commerce as well as the commerce clause of the Constitution.¹⁷

They further contend that the Shreveport case, although holding that certain activities of the Interstate Commerce Commission under the Act to Regulate Commerce had interfered with the rights of the states, in no sense covers the question of the power of Congress to determine the amount of any rate for transportation between two points wholly within one state.¹⁸

It is pointed out that the reports of the Interstate Commerce

¹⁶ *Baltimore and Ohio Railroad Company v. United States*, ex rel. *Pitcairn Coal Company*, 215 U. S. 481, 498-9.

¹⁷ *First Employers' Liability Cases*, 207 U. S. 463; *Gibbons v. Ogden*, 9 Wheat. 1, 203-204: Within the state power is "that immense mass of legislation which embraces everything within the territory of a state, not surrendered to the general government: all which can be most advantageously exercised by the states themselves. Inspection laws, quarantine laws, health laws of every description, as well as laws for regulating the internal commerce of a state, and those which respect turnpike roads, ferries, etc., are component parts of this mass. No direct general power over these objects is granted to Congress; and, consequently, they remain subject to state legislation. If the legislative power of the Union can reach them it must be for national purposes; it must be where the power is expressly given for a special purpose or is clearly incidental to some power which is expressly given."

¹⁸ 234 U. S. 353.

Commission subsequent to the one involved in the Shreveport case, show that the Commission has most noticeably refrained from the slightest attempt to claim the right to pass on the reasonableness of intrastate rates. They also call attention to the necessity for such right to enable the Commission to properly determine whether a state-made rate gives undue preference to state commerce when compared with a rate applicable to interstate commerce. It is asserted that undue preference must rest upon the fact that the state rate complained of is less than a reasonable maximum rate, but this claim is not supported by *American Express Company v. Caldwell*,¹⁹ in which the court makes this statement: "The finding that discrimination exists and that interstate rates are reasonable does not necessarily imply finding that the intrastate rates are unreasonable. Both rates may lie within the zone of reasonableness and yet involve discrimination." A previous decision of the court is cited in support of the language last quoted,²⁰ but the language of the prior opinion,²¹ referred to as ground for the authority, is as follows:

We agree with plaintiff (the Interstate Commerce Commission) that a charge may be perfectly reasonable under Section 1 and yet may create unjust discrimination or unreasonable preference under Sections 2 and 3. As was said by Mr. Justice Blackburn in *Great Western Railroad Co. v. Sutton L. R.*, 4 H. L., 226, 239: "When it is sought to show the charge is extortionate as being contrary to the statutable obligation to charge equally, it is immaterial whether the charge is reasonable or not; it is enough to show that the company carried for some other person or class of persons at a lower charge during the period throughout which the party complaining was charged more under the like circumstances."

The language last quoted seems to indicate that the charge exacted from the complaining party, while it might be reasonable in and of itself, did nevertheless, subject the complaining party to unjust discrimination because of other persons paying a lower rate at the same time for a like service. In other words, the reasonable rate complained of could not create discrimination against anybody save the party paying it, and that would be due to the lower rates enjoyed by other persons. It is therefore claimed, that a rate found by a state to be reasonable as a maximum charge for transportation

¹⁹ *American Express Company v. Caldwell*, 244 U. S. 617-624.

²⁰ *Interstate Commerce Commission v. Baltimore and Ohio Railroad Company*, 145 U. S. 263-277.

²¹ 145 U. S. 277.

between two points within its borders cannot result in undue preference or subject anyone to unjust discrimination. If unjust discrimination results thereby it must be due to the maladjustment of the interstate rates. It is also said that a rate found by the state to be reasonable as a maximum cannot properly be increased by the mere declaration of the Interstate Commerce Commission that it gives an undue preference to state commerce, the removal of which is required by an advance in the state rate, as such action on the part of the Commission can in no way be considered as passing upon the amount of said rate.

In this connection it is said that the Commission has given greater weight to the act of the state as establishing a case of undue preference than it has in considering the act of a carrier responsible for a like rate adjustment. Section 3 of the act to regulate commerce,²² in dealing with undue preferences and advantages, does not specify the character of commerce that may bring about the undue preference. It may be found that certain interstate commerce may cast a burden upon other interstate commerce by reason of the maladjustment of rates, and thus bring about a violation of this section. And in view of this fact, it is then said that the Interstate Commerce Commission has in numerous cases²³ (of which the 2 cited in the footnotes are illustrative) held that a carrier may make a rate between a given point of origin and a destination on its line, without regard to the rate of another carrier from another point of origin to the same destination, and if the rate of the first carrier is not met by the second, neither is subject to the claim that it has violated the provisions of Section 3. And this has been the settled rule in the Supreme Court for many years.²⁴ But, say the opponents of federal control, because the state requires a carrier to establish a reasonable

²² "That it shall be unlawful for any common carrier subject to the provisions of this act to make or give any undue or unreasonable preference or advantage to any particular person, company, firm, corporation, or locality, or any particular description of traffic, in any respect whatsoever, or to subject any particular person, company, firm, corporation, or locality, or any particular description of traffic, to any undue or unreasonable prejudice or disadvantage in any respect whatsoever."

²³ *Railroad Commission of Kansas v. Atchison, Topeka and Santa Fe Railway Company*, 22 I. C. C. 407-416; *Blodgett Milling Company v. Chicago, Milwaukee and St. Paul Railway Company*, 23 I. C. C. 448-449.

²⁴ *East Tennessee, Virginia and Georgia Railway Company v. Interstate Commerce Commission*, 181 U. S. 1, 18, 19, 20.

maximum rate for intrastate commerce, which a different interstate carrier declines to meet in its interstate business, the carrier obeying the act of the state legislature may be held in violation of Section 3, which forbids undue preferences, even though the transportation within the state is specifically eliminated from the application of the Act to Regulate Commerce.²⁵ It is said that both the court and the Commission have lost sight of the distinction between the application of the act to an interstate carrier, and the lack of power under the act to interfere with intrastate transportation handled by the interstate carrier; that transportation which may move free from the restrictions of the Act to Regulate Commerce can not possibly subject transportation governed by the act to unjust discrimination. The following illustration is claimed to demonstrate the unsoundness of the decision, both of the Commission and the court in the Shreveport case:

If carriers operating between Texarkana, Arkansas, and Dallas, Texas, and not serving Shreveport, decide to establish a rate between the first two points, they may do so provided the rate is not less than the cost of transportation, and other carriers operating between Shreveport and Dallas may meet the rate or not, as they see fit. If they fail to meet it and complaint is made before the Commission, and the latter adheres to its numerous decisions on the question, neither the carriers operating between Texarkana, Arkansas, and Dallas, nor the carriers operating between Shreveport and Dallas have violated Section 3. But if the carriers operating between Texarkana, Texas, and Dallas apply the rate between those points established by the State of Texas, and the carriers operating between Shreveport and Dallas do not see fit to meet it, and shippers of Shreveport complain of undue preference in favor of the shippers of Texarkana, Texas, the Interstate Commerce Commission may find an undue preference has been created by the carriers obeying the act of the State of Texas, although the Commission would have relieved the carriers from the charge if they had established the rate from Texarkana, Arkansas, or Texarkana, Texas, to Dallas volun-

²⁵ Section 1 of the Act to Regulate Commerce provides in part: "Provided, however, That the provisions of this Act shall not apply to the transportation of passengers or property, or to the receiving, delivering, storage, or handling of property wholly within one State and not shipped to or from a foreign country from or to any State or Territory as aforesaid. . . . "

tarily. A recent case in the Supreme Court, not yet officially reported,²⁶ seems to indicate that it would hold the carriers responsible for the voluntary establishment of an intrastate rate, if declared to unduly prefer intrastate commerce over interstate commerce.

These considerations, say the opponents of complete federal regulation, will require the court to adopt a different construction of the law whenever the question of the power of the Interstate Commerce Commission to determine the amount of a state-made rate is presented, and, as the lack of power in the federal government to determine the amount of an intrastate rate has been repeatedly declared by the Supreme Court, the only way by which that power which is essential to complete nationalization can properly be exercised, is through the medium of a Constitutional amendment.

It will be observed that the first two grounds upon which the opponents of federal control challenge the existence of the federal power necessary to bring it about, were not decided in the Shreveport,²⁷ the American Express Co.,²⁸ or the Illinois Public Utilities Commission cases,²⁹ and are therefore still open.

The third objection of the opponents of complete federal control raises a question of power resulting from an attempt to apply the decision in the Shreveport case. It is claimed that a reasonable maximum rate can not give an undue preference or create unjust discrimination against any other rate. This position is somewhat shaken by the decision in the American Express Company case, *supra*, but even so, it is said that whenever the Interstate Commerce Commission determines that a rate declared by a state to be reasonable as a maximum for transportation subjects interstate transportation to unreasonable prejudice and disadvantage because the interstate rate is higher than the reasonable maximum rate set by the state, the removal of the preference or disadvantage requires an advance in the state rate. This is essentially true, whenever in the same decision the Interstate Commerce Commission declares the higher interstate rate to be reasonable as a maximum.

When the state rate is advanced there is no tribunal before

²⁶ *Illinois Central Railroad v. Public Utilities Commission of Illinois*, January 14, 1918.

²⁷ 234 U. S. 342.

²⁸ 244 U. S. 617.

²⁹ See citation 26.

which a shipper enjoying that rate can go to test the reasonableness of it. If he appears before the Interstate Commerce Commission in the proceeding and attempts to show that the state rate is reasonable as a maximum, he is met with the statement that the Commission has no control over the rate in question, or the transportation moving under it, and that testimony relating to the matter is incompetent. The shipper can not go before a tribunal created by the state because under the decision in the Shreveport case, the act of the Interstate Commerce Commission is final. And thus the state shipper is put in this position: his rate is increased without an opportunity to be heard as to whether the advanced rate is just and reasonable as a maximum. The Act to Regulate Commerce declares every unjust and unreasonable rate to be unlawful. The state laws so declare. And it has long been the doctrine of the Supreme Court that no carrier could establish a state rate higher than the service was reasonably worth,³⁰ and for more than 30 years we have had the statutory declaration that unreasonable interstate rates were unlawful.³¹ In other words, the shipper has the right to a reasonable rate, and having that right, unless he is provided a remedy for its protection, he has been denied due process.

The arguments of the opponents of complete national regulation, if not sound, are at least plausible, and discussion will not subside until the Supreme Court specifically passes upon the disputed questions.

If, however, the doctrine of the Shreveport case is sound, and the court continues to follow the principle announced, the opponents of complete national regulation have slight hope for the successful maintenance of their contentions. The three questions of power would then be answered in favor of the federal government, and especially the third, by the enactment of a law giving to the Interstate Commerce Commission the power, whenever complaint is made that a given state rate discriminates against interstate rates, to declare that ascertainment of the reasonableness of such state rate is essential to a correct determination of the existence or the

³⁰ *Smythe v. Ames*, 169 U. S. 466.

³¹ Section 1 of the Act to Regulate Commerce provides in part: "All charges made for any service rendered or to be rendered in the transportation of passengers or property . . . as aforesaid, or in connection therewith, shall be just and reasonable; and every unjust and unreasonable charge for such service or any part thereof is prohibited and declared to be unlawful."

non-existence of the preference or discrimination, and thereupon to determine the reasonableness or the unreasonableness of the state rate as fully and completely as if dealing with an interstate rate.

NATIONALIZATION OF RATES A CONTINUING PROBLEM

It would seem to be immaterial, so far as federal power to nationalize rates is considered, whether the federal government continues to operate the railroads under the proclamation of the President, under date of December 26, 1917, or whether the federal government should finally purchase the railroads.

In any event the power to regulate, control, operate, or own must come from Congress, and it can exercise only the powers that it finds in the Constitution.

The joint resolution of April 6, 1917, declaring war against Germany, the joint resolution of December 7, 1917, declaring war against Austria, and Section 1 of the act approved August 29, 1917, authorizing the President in time of war to take possession of any system or systems of transportation (under which provisions the President found the authority for his proclamation), gave no greater power to the President than Congress could have given to any other officer of the government or to any tribunal created by it.

Congress must, in the first instance, decide whether or not it will exercise any power granted to it under the Constitution. When it determines to exercise a given power it may choose the form of the legislation that it deems necessary and appropriate for the exercise of the power.³² Conditions existing at the time of the exercise of a power may determine in some instances whether the legislation adopted was necessary and appropriate to carry out such power. If the subject matter of the legislation is covered by a grant of power in the Constitution, and there appears to be some relation between the power and the legislation adopted, the legislation will be deemed to be necessary and appropriate.³³

The power to declare a war is one of extreme responsibility and only compelling necessity will prompt the exercise of it. A state of

³² Article I, Section 8 of the Constitution, contains grant of powers to Congress, the last clause of which is as follows: "And to make all laws which shall be necessary and proper for carrying into execution the foregoing powers; and all other powers vested by this Constitution in the Government of the United States or in any department or officer thereof." *Legal Tender Cases*, 12 Wall. 538; *Northern Securities Company v. United States*, 193 U. S. 343.

³³ *McCulloch v. Maryland*, 4 Wheat. 418; *Logan v. United States*, 144 U. S. 82.

war creates an emergency that would justify, as appropriate and necessary, any kind of an act that would even remotely assist in the prosecution of the war. Under war conditions, a declaration by Congress that the railroads and other common carriers of the country were necessary for public use in carrying on the war would justify the most liberal construction of the law by which such properties were converted to the public use, as being necessary and appropriate to get the full use of the power. This is not to say, however, that limitations on Congressional action can be disregarded. While it is for Congress to declare the necessity for converting private property to public use, it must observe the fifth amendment when it comes to the matter of compensation.³⁴ And during the war, or after the war ends, if Congress should determine that full and complete regulation of commerce among the states requires ownership by the government, it could, under the provisions of the Constitution authorizing it to pass such rules and regulations essential to the carrying out of that power, properly provide for the manner in which the change of ownership could be brought about, subject at all times to the limiting provisions of the Constitution.

Then again, the government might at the termination of the war, by appropriate legislation take over the ownership of the carriers on the ground that they were necessary and essential for carrying on the proper functions of the government. They might properly be considered as necessary to the equipment and maintenance of the army and the navy, to the movement of troops, or materials and supplies to and from forts, arsenals, or other government factories, or buildings, as well as for the handling of United States mails. But in these instances, a transfer of the title to the real estate located in the various states would not give to the federal government complete legislative control thereover, unless the legislatures of the various states consented thereto.³⁵ The federal government would

³⁴ *Monongahela Navigation Company v. United States*, 148 U. S. 312.

³⁵ The Constitution, by Article I, Section 8, clauses 12 to 17, inclusive, provides as follows:

"The Congress shall have power

"To raise and support armies, but no appropriation of money to that use shall be for a longer term than two years."

"To provide and maintain a Navy."

"To make rules for the government and regulation of the land and naval forces."

own such property the same as any other proprietor. It is not clear that the rule as to the legislative control over the real estate in the different states is any different if the federal government should take over the ownership of the railroads under the power in the commerce clause of the Constitution.

Even though the government becomes the owner of the railroads it is not believed that the President, or any other officer of the government who might be designated, or any tribunal created, could establish rates for the transportation of goods of private citizens, except on the basis of reasonableness. It would not be in keeping with the spirit of American institutions to permit the government to take over the railroads and then charge the shipping public rates that were unreasonable.

Rail transportation has become an absolute necessity to the commerce of the country. It is necessary because it is not possible for every community to produce everything it consumes; therefore the surpluses in other communities must be moved to the communities requiring them. If Congress should give to the President, or other officer of the government, or some tribunal created thereby, the power to establish rates without an opportunity for the parties in interest to be heard, the grant would be one of doubtful validity. But if Congress does possess the power to pass an act of that character, it seems clear that arbitrary action on the part of the person or tribunal exercising the power would not be immune from judicial interference.³⁶

"To provide for calling forth the militia to execute the laws of the Union, suppress insurrections, and repel invasions."

"To provide for organizing, arming and disciplining the militia, and for governing such part of them as may be employed in the service of the United States, reserving to the States, respectively, the appointment of the officers, and the authority of training the militia according to the discipline prescribed by Congress."

"To exercise exclusive legislation in all cases whatsoever, . . . over all places purchased by the consent of the legislature of the state in which the same shall be, for the erection of forts, magazines, arsenals, dock-yards, and other needful buildings." *Fort Leavenworth Railroad Company v. Lowe*, 114 U. S. 331; *Chicago, etc., Railroad Company v. McGlinn*, 114 U. S. 545.

By Article I, Section 8, clause 7, the Constitution provides: "The Congress shall have power. . . .

"To establish post offices and post roads." *Cleveland Railroad Company v. Franklin Canal Company*, 5 Fed. Cases 2890.

³⁶ *Degge v. Hitchcock*, 229 U. S. 162, 170-171.

REGIONAL RAILROAD COMMISSIONS: THEIR RELATION TO THE STATE COMMISSIONS AND TO THE INTERSTATE COMMISSION

BY J. E. LOVE

Any possible discussion of this subject will suggest in the mind of the reader, at the outset, doubt as to the situation with respect to regulation that existed when the discussion was prepared. For this reason, let it be understood that the following observations are made in the light of the railroad situation as of January 10, 1918.

The writer would be exceedingly glad to be the author of a suggestion that would relieve or end the troubles of the transportation industry in its relation to the public, or to make such comment upon suggestions already made by others as would materially contribute to that end. Mr. Dooley once remarked that "a real statesman is the man who finds out which way the procession is going and grabs the stick away from the drum major." The writer would be glad to qualify as the statesman to lead the procession of transportation affairs to the goal of satisfactory regulation. But it is for him to join the procession,—not to lead it. The stick is in other hands.

The regional commission idea embraces any jurisdiction broader than that of state lines and narrower than that of complete and exclusive federal jurisdiction. It is given consideration because of discontent with conditions existing heretofore. The advocates of the idea, or of the development of an idea under some such name, fall naturally into two classes: persons who believe that any sort of state regulation heretofore known is bad and contrary to the interests of the country and the industry involved; and persons who believe that state regulation has not failed totally, but has failed in part, and should be superseded, at least in part, by something broader. Those who believe that state regulation, coördinated to the extent that it has been in the past with federal regulation, has worked satisfactorily or is the best available solution for the problem of promoting and protecting all interests involved, and those who believe the only solution to be exclusive and complete federal control or regulation are not in favor of regional commissions.

Another fact which may as well be stated before discussing suggestions of record on the subject is that, while a condition and not a theory confronts the country today, our subject deals strictly and exclusively with theory. The person who asks the public to listen to a presentation of views on this subject, therefore, runs more or less risk of being interrupted by someone rising to make the point that the subject is not germane to the situation.

Looking into the files we find that discussion touching this subject has been going on for five or six years. The nearest thing to a definite plan results from three or four ideas stated at different times, and suggests a system of regional commissions with working headquarters at various points throughout the country, such commissions to be organized with one of the members of the Interstate Commerce Commission or a person to be appointed by the President as chairman and including one representative from the personnel of the state commissions that are supplemented or supplanted by the regional jurisdiction.

So far as the writer is informed, this plan is the only one offered as anything between dual or state and federal regulation and regulation by the federal government exclusively. What is known as the "Philadelphia plan" and some other suggestions of similar character have received some consideration as offering a solution for problems heretofore troublesome, but they are, universally, predicated upon complete elimination of state regulation of any sort or in any degree. They need not and should not be discussed as suggesting regional commission control.

Writers on the transportation question, especially those openly expressing the feeling of the railroad managers on the subject, have long complained of the burden of responsibility to "forty-nine masters," intending by the interminable reiteration of this complaint to make the public believe that most of the railroads of the country have been accountable to forty-eight state commissions and the Interstate Commerce Commission. The fact that there are but forty-seven state commissions of any character having to do with utility regulation has escaped them, and they have never published a list of railroads subject to as many as nine, not to mention forty-nine, jurisdictions. But there is no use dilating upon this angle of the situation. Readers of this publication understand perfectly that the unfairness and inaccuracy of the complaint re-

ferred to are present in large degree in much of the propaganda in favor of reduced regulation and increased rates with which the country has been surfeited in recent years. But be that as it may, it is urged for the regional commission idea, as above described, that it would reduce the number of "masters" materially and thereby be of advantage.

It is further urged in support of this idea that matters of limited importance, that is, involving only state questions or state interests, would be considered and disposed of alike in all the states of the region if given the benefit of consideration by a regional commission; that uniformity would also be secured in rates, rules and regulations of various states of the regional jurisdiction in which, presumably, transportation conditions would be similar; that the imaginary state lines would be largely eliminated from consideration in dealing with most of the matters involved, resulting in a community of interest between members of state commissions, between the state and interstate commissions and also between the carriers and the various commissions to a far greater extent than has heretofore been the case; and that these results would be accomplished without complete relinquishment of the state control idea, which unquestionably would be relinquished by many states only under the most severe pressure.

To safeguard the federal government in its power over such matters as have heretofore been under exclusive federal control there would, of course, be available an appeal from decisions of the proposed regional commission to the Interstate Commerce Commission as at present constituted, and, as to matters now so appealable, to the Supreme Court of the United States.

Objections to the adoption of any such plan as herein outlined rest chiefly upon the ground that there would be entailed an additional expense of regulation, with further delay in getting results, and that, while a step in the right direction, it does not offer the complete relief that the situation demands. In other words, most of the objectors are in the position of refusing to consider. They desire complete elimination of state commissions and all semblance of state regulation, demand it as a *sine qua non*, and are willing to discuss nothing which in any way preserves that idea.

The writer does not at this time give his personal indorsement to the regional commission idea, nor does he reject it *in toto*. Con-

ditions known heretofore have gone and may never return. His experience and observation have resulted in the conviction, however, that there are questions, hundreds of them every month and thousands of them every year, even in a jurisdiction as limited territorially as that of the Oklahoma Corporation Commission, that can be handled, not only to the best advantage of all concerned, including the railroads, as they have been handled heretofore, by state commissions, but that cannot be handled satisfactorily by any federal board of control located at and operating from any single point. If the state commission is not to be continued as heretofore with power to receive and dispose of complaints arising on a moment's notice and demanding immediate disposal, something in its stead must be provided. That a regional commission organized on any plan that might be devised could handle such matters with satisfaction to the public is possible, but it is exceedingly doubtful.

The part that the state commissions, many of them, have played in bringing about a spirit of popular coöperation in increasing the efficiency of the transportation systems of the country as a war machine has been important, and has been performed more promptly and with better success than could have been accomplished through any governmental agency less local in jurisdiction than the state commission.

Some time before war was declared the Oklahoma commission began safeguarding the communities of this state against coal famine this winter. It induced the purchase of hundreds of cars of coal by dealers in communities that would have suffered acutely before this time had not this effort by the commission been put forth. A federal or even a regional authority could not have secured the ear of the public as it was secured by the state commission, and the results secured had not the state commission been available for the expression of the need of the hour would undoubtedly have been relatively unimportant, if not negligible.

Train service for many towns in Oklahoma has been curtailed; physical connections have been denied; communities have been persuaded to be content with depot facilities clearly inadequate; delivery of cars of fuel or perishables has been expedited; building materials have been searched out in congested yards and hurried to destination with benefit to the contractor, the laborer and the car situation; the urgent need for cars for moving stock has been dis-

covered and the need supplied in scores of instances; and innumerable other complaints of many kinds have been handled informally but effectively with the result that traffic conditions and the financial balance sheet of both the carriers and the shipping public have been benefited. The railroads of Oklahoma have been enabled to do more to win the war because of the activities of the Oklahoma commission. Further, and perhaps even more important, complaint over the extraordinary situation has been brought to an irreducible minimum, converted into cheerful acquiescence, and finally into enthusiastic coöperation on the part of the public. This result has been accomplished, unquestionably, more quickly and more thoroughly than could have been done through any agency other than the state commission. The bearing of these facts upon the regional commission idea will be apparent.

George Ade, the Hoosier humorist, recently remarked, according to the government's daily *Official Bulletin*, that the declaration of a man between 30 and 50 to a man of draft age, that he would be keen to enlist if not too old, would not be believed, even if it were interesting. If the views here expressed by the chairman of a state commission on the subject of a proposal to seriously impair or abolish powers of a tribunal of which he is a member, and of whose value, financial, material and moral, to the public it serves he is perfectly sure, be subject to discount on the ground that the personal factor in the equation is not susceptible of elimination, he suggests merely that the views of other supposed authorities, whose responsibility is different but whose personal interest none the less, be weighed in the same balance.

As already suggested, it is more than likely that conditions heretofore complained of because of too much or too little regulation have gone to return no more. It is inevitable that government control on a military basis will develop benefits that the public will demand be made permanent and will reveal practices that the public will never countenance again. With competition for the first time in American history under the ban of the government, with combines of systems, pooling of traffic and earnings, and many practices heretofore outlawed invoked as the order of the day, the subject of regional commissions for railway regulation becomes so manifestly one susceptible only of speculation and conjecture as to justify leaving it with the reader of *The Annals* for such further consideration as his fancy may dictate.

THE TOMORROW OF FINANCE

BY S. N. PATTEN

A man to whom I was quoting figures exclaimed: "I cannot think in terms of billions." This inability illustrates a defect in the popular thought. Men educated in a particular industry can think in its terms but they become lost when a national budget is presented. In most cases the situation is even worse for they think only in terms of a family budget. The majority of families have not even risen to this concept but merely spend when they can and seek credit for their deficit. It is no wonder that they become confused when the nation's budget is presented and even with the best intentions make serious mistakes when they undertake to handle government problems. Whether we will or no, the national budget is in terms of billions and solutions of national problems can be found only when a budgetary view of national affairs is adopted. Huge as the railroad problem is by itself, it cannot be settled apart from the other problems of national finance. Nor can we settle the food problem, the fuel problem or the shipping problem without a like reference to the related problems, each represented by its billions in national finance.

This popular confusion of thought is represented by the action of Congress which appropriates 20 billions for war purposes and authorizes only 4 billions of taxes. Revenue measures all have this same defect,—a lack of realization of the magnitude of the problems to be faced. It is easy to suggest means of raising 2 billions or even 4 billions of taxes. The proposer thinks he has done his duty by suggesting some small increase of taxation, forgetting that the deficit he leaves unprovided for will disorganize not only public credit but also private enterprise unless it is met in some adequate way. If private enterprise is not to be disorganized capital must be forthcoming regularly. The capital needs of the railroads have been forced upon our attention and must call for consideration under any system of government regulation, control or ownership. The problem of capital is but part of the larger problem of a national budget. Capital can come from two sources—profits or savings.

Latterly it has come from profits. In the tomorrow of finance it must come from savings. This is the issue that the railroads—indeed, all industry—must meet.

This brief introduction brings me to the heart of the problem and indicates the way the problems of national finance should be met. Our railroads, our food and our industry are parts of a national budget which we must visualize before any one issue can be adequately faced. The year 1914 was the last year of normal peace conditions. By contrasting the budget of this year with that of 1918 the exigencies of our present situation can be clearly seen.

NATIONAL BUDGET

1914	Billions	1918	Billions
Total production	40	Total production	70
Waste	10	Waste	18
Earned income	10	Earned income	16
Surplus	20	Increase of government expenditure	15
Annual increase of capital	2	Increase of currency	3
Annual increase of values	5	Excess of exports over imports from 1914 to 1918	8
Stock	12	Decrease of stock	8
Ground rent	4	Decrease of industrial capital	2
Total bank deposits	18½	Decrease of security values	10
		Government bonds held by banks and other credit institutions	4
		Total bank deposits	26½

The year 1914 was a year of sound prosperity and of it the facts are well known. The basis of my budget is the income of that year which is usually placed at 30 billions. The addition I have made, which is the only unique feature of the table, is an endeavor to estimate the waste of the year. We overestimate the evils of economic stress if we do not show the economy which reduced income imposes. A war budget of 10 billions does not mean a like diminution in national welfare. The reduction of waste eases the situation and prevents acute suffering.

By waste I mean any loss of material which does not result in full production. If the material for three suits of clothes passes into the consumer's hands only as two suits, there is waste. If a hotel buys twice the quantity of food which the consumers get, there is

waste. So also is it waste if willing workers can find no employment or if they are prevented from working by unnecessary sickness. Add all these maladjustments together and the sum of annual waste becomes a striking magnitude. It is a modest statement to affirm that the production which does not reach the ultimate consumer plus the failure to produce which known methods could have prevented, amount to one-fourth the real production. Waste is not important in estimating the income of past years. It is significant only as it alters the pressure which a period of national stress imposes. Far more important is the estimate of the annual amount of earned income as contrasted with the surplus enjoyed. Here estimates are widely different, not because the facts are in question, but because of differences in opinion as to where various items should be placed. The ordinary business man reckons the surplus as the amount left when the year's expenses are paid. He thus regards it the same as the annual increase of security values which amount to five or six billions a year. A single taxpayer assumes it to be the same as the total amount of ground rent which is perhaps 4 billions a year. Capitalists regard their interest as an earned income and professional men likewise count their earning as a payment for their costs.

These estimates I have discarded as expressions of personal feeling which creates a bias in each group in favor of its own form of income. All the confusion about the distribution of wealth is involved in this discussion and all the uncertainty of its results. If the various claims were added they would not tally with the known national income but would greatly exceed it. The general result is the denial of the power of the government to make large expenditures. Each class wants its share exempted and what is left may suffice to meet the ordinary expenses of government but it is not enough to meet the expenditure of a great war. Can we meet the expenses agreed to by Congress for the year 1918? "No" must be the answer if these class estimates are accepted. Who has discovered how to raise more than four billions on the basis he accepts? It was impossible to raise the tax rates higher than they were placed, so great was the pressure from many groups each with its own special interests to guard.

The solution is not to accept any of these pleas but to base exemptions on vital needs measured objectively. The real surplus

is the difference between the amount produced and that needed to maintain the personal welfare of the population. We now have accurate measures of the demands for food, shelter and clothing. The figures show that they are from \$600 to \$800 a year, varying with the size of the city in which people live. But this \$800 for large cities represents food prices as paid in retail stores. There are profits to someone on these sales and on the house rents representing land values. Labor costs would thus be these prices minus the profits of storekeepers and landlords. A fair estimate of labor costs would be about \$500 a year per family or \$100 a year per person. A sum of 10 billion dollars a year is thus needed to support the population of 1914 at the prices then prevailing. What is not included in these costs is surplus. With it the people buy the comforts and luxuries they enjoy but which they could forego without physical detriment if a period of national stress demanded the sums thus expended for national purposes. We may therefore assume that in 1914, of the 30 billions of income, 10 billions was needed for the physical welfare of the people and that 20 billions was a surplus which might be diverted to national purposes without a lowering of the standard of life. No such sacrifice of comforts and luxuries has been demanded nor is it likely to be. It, however, represents what Germany is doing and why the German people have held out so long and so well. Such suffering as Germany has had to endure is not the result of the reduction of income which has been demanded but of wrong estimates made at the beginning of the war. The new view of food values was not accepted by the Germans at the beginning of the war. As a result they killed off their live stock too rapidly and could not replace it when they found their shortage was in fats and not in proteins. Such a mistake may be fatal to a blockaded nation like Germany but it does not affect America with its generous supply of all needed commodities. We could feed, clothe and house our people for \$100 per person. The rest is surplus on which the nation has a first claim.

Such are the problems of sustenance. The increase of prosperity on which the increase of surplus depends is largely a question of the increase of capital. A conservative estimate of this increase is 2 billion dollars a year. This means that production exceeds consumption by this amount. The sum, however, grows with every

improvement in the processes of production or in the utilization of the labor force. These improvements add about 200 million to the surplus each year and show our rate of annual progress. But far different from these estimates are those of the increase of values. The increase of values is the increase of security values determined by the market price of stocks and bonds. Of these prices, our knowledge is fairly complete and indicates an increase of values from 4 to 6 billions a year. The increase of security values is thus more than double the increase of capital as measured in stock and physical improvements. This is due to the low rate of interest which gives high security values. We have a nominal rate of interest (4 per cent) in which values are estimated when the real rate is nearer 8 per cent. So long as the two rates are so far apart, the rapid rise of security values is inevitable. The values thus made are not real but estimates based on the rate of interest. We are said to be worth 200 billions but a rise of the interest rate from 4 to 5 per cent would take a quarter from these estimates.

The budget of 1918 represents the conditions of January 1 and is therefore subject to change as the facts of the year become more fully known. The essential difference is due to the rise of prices. Of this, various estimates have been made varying from 60 to 100 per cent. The cost of living has risen 88.5 per cent according to the figures of the Federal Department of Labor. Agricultural produce of practically the same amounts valued at 10 billions in 1914 were valued at 21 billions at the close of 1917. It would seem therefore that an increase of 75 per cent was a conservative estimate and on this basis the money value of the national income would rise from 40 billions in 1914 to 70 billions in 1918. The figures I use for waste do not mean an increase in the amount wasted but in the value of what is wasted. Rises in wages are difficult to estimate as they are different in the various occupations. Unskilled labor has perhaps gained a net advantage through the rapid rise in its rate of payment but skilled labor and the lower range of salaries have gained but little. Between groups as varied as they are it is hard to strike an average. There can, however, be little doubt but that the workers and the salaried groups have as a whole suffered by the change. A rise of 60 per cent is probably an overestimate of the advantage they have received.

On this basis the money value of the national surplus would be

about 40 billion dollars of which the government takes 15 billion in taxes and bond issues. This would leave 5 billions still in the hands of producers as extra profits, an estimate which is probably below the actual figures.

Great inroads have also been made in the stock of goods, so great in fact as to change the surplus of 1914 in many cases into a deficit. This shortage we are beginning to feel and will feel more severely as the year progresses. The 12 billions of stock held in 1914 has been reduced to below 4 billions. My estimates are based on these facts. The excess of exports over imports for the three years from 1914 to 1917 inclusive was 8 billion dollars. In return for this we have received about 5 billions of American securities held abroad and 3 billions in cash. As there has been little or no reduction in the amount consumed, the condition of today differs from that of 1914 namely in the reduction of stock. Goods have gone out while securities and gold have flowed in.

In addition to this change there has been an actual loss of industrial capital. The railroads have not kept up their rolling stock, the evil effects of which we now keenly feel. Manufacturers have saved by using their machines and tools for a longer time and thus reduced current expenses at the expense of the future. Many factories have been transformed into military establishments which process reduces the industrial capital. Such a factory must be rated, not as it yields for war purposes, but as it will yield when it is again put to industrial uses. The income of war plants is not national income but a part of the expenses of war.

The loss in security values has also been equally severe. The amount of securities listed on markets are estimated at 40 billions and the average decline in value has been 25 per cent, thus making a loss of 10 billions in values to be added to the loss of 10 billions in goods. The amount of bank deposits were $18\frac{1}{2}$ billions in 1914 and $26\frac{1}{2}$ billions in 1917. This seems a gain but if the rise in values has been 75 per cent the deposits of 1917 would purchase 6 billions less goods than would the deposits of 1914 at the prices which now prevail. These all represent pre-war losses. Our war expenses come under another head. Of the bonds sold at least 4 billions were still in the hands of the banks or related institutions at the beginning of the year. The public have promised to take much of this, thus relieving the pressure on the banks, but it must be done by a con-

traction of expenditure on their part in the year 1918. It is a deficit weighing on national resources until these promises are fulfilled.

The equilibrium in terms of the budget of 1914 left a surplus of 2 billions for future investment. Given the same disposition to spend in 1918, an increased government expenditure of 15 billions would leave a deficit of 13 billion dollars. A new equilibrium thus demands a decrease of nearly a third in personal expenditure. There is little in the history of the last three years to show that measures thus far devised will produce the desired result. The year 1917 shows no net decrease in personal expenditure. Many have doubtless promised to save in the year 1918 but promises are valueless unless measures are devised to make them effective. Were the situation merely a result of the war, we might regard it abnormal and wait for peace to restore what the war has disturbed. There is, however, much evidence that the situation is the normal outcome of far-reaching changes which were manifest before the war but which have become active forces only under the pressure which the war has created. Had 10 billions of extra funds been demanded at any time in the last ten years, the same crisis in national finance would have occurred. The reason is that there has been a sharp increase in the urgency of consumption due to the cheapening of comforts and luxuries which thus produces an increased desire to spend. At the same time the increased security of salaried incomes has reduced the willingness to save. An annual expenditure in the form of life insurance will give a stability to family life which a real saving fails to secure. We have ceased to be a nation of savers and have become a nation of life insurers. - This means security and increased happiness but it does not involve that rapid increase of capital which former methods encouraged. The low birth rate adds to the intensity of present expenditure and is probably its result rather than its cause. But it tends to an equilibrium between expenses and income which shuts out saving. There is still some saving among families whose incomes are under \$1,200 a year. The uncertainties of work, of health and of life keep active many of the older economy motives and make an annual surplus a necessity. But if the class whose incomes range from \$1,200 to \$4,000 were put in a group by themselves, they would probably owe society more than society owes them. They have ceased to own houses for

apartment life suits them better. They own automobiles, but they are in debt for them. They may go to high priced theaters less but they patronize motion pictures more. They are well housed, well clothed and enjoy summer vacations, but all these add to the urgency of present expenditure and leave less room for the saving by which capital is increased. If we add to this the rapid increase in display advertising and the growth of department stores we complete the picture of the growing power of expenditure over the saving instinct.

These facts are not war facts but a statement of tendencies clearly evident before the war came on. I have frequently called attention to them as a social change to which industry must adjust itself. The war has made a crisis in that it increases national expenditure without reducing the pressure of individual wants. The growing deficit of pre-war times becomes a startling fact when it is coupled with the present war expenses. I say pre-war deficit because the pressure of deficit would have been felt then if it had not been covered by the savings of the small class whose incomes exceed \$5,000 a year. Their profits have been high, leaving an excess for saving in the face of increased expenditure. The rich in this sense had probably a gross income of 10 billions before the war, of which they saved perhaps one-quarter. This would account for all the saving made at that time. If people with smaller incomes had no deficit they were fortunate. Certainly the class as a whole contributed a negligible sum to the national saving. Many complaints are made that all the increase of wealth goes to the rich, but with the lack of motive to save it is hardly possible that it would be otherwise. Only the prosperous have an income which exceeds their urgent wants. Families with medium income live as they go and the workers save only to meet the exigencies arising from sickness and non-employment.

I picture this pre-war situation so as to show the crisis the nation then faced. The period from 1900 to 1910 were flush years in which large profits were made. The industrial surplus was placed on the investment market and the rate of interest forced thereby to below 4 per cent. At the same time the sources of amusement and pleasure were vastly increased making a pressure for consumption by which the income of the average family was used up. The people thus ceased to save, but the loss of these savings was not felt

because of the vast surplus made in the newly enlarged industries. Capital thus ceased to be savings and became industrial profit. The low rate of interest forced up security values to such a degree that one dollar of real capital became two dollars of values in security. By 1910, the sources of the great surplus in the large industries were in a measure reduced and the supply of fresh capital fell off. A check on the increase of capital was thus created which could be met in only two ways. Either a higher rate of interest must be offered and popular saving evoked, or higher rates must be charged so that the industrial surplus would be sufficient to permit the proper increase of capital. If a higher rate of interest were offered security values would fall. A 5 per cent rate instead of 4 per cent would decrease security values by a quarter. Naturally this solution did not appeal to the nation's financiers. They chose the other plan of forcing up rates so that the increase of capital would come from the surplus thus acquired. This policy is apparent in the case of railroads whose values would be most affected by a rise in interest rate. Everyone is familiar with the struggle about rates between the Interstate Commerce Commission and the railroads. The rates were held down. The railroads refused to offer higher rates of interest, stopped making improvements and practically ceased to increase their rolling stock and other equipment. A crisis in railroad finance was thus approaching even if the war had not intervened. Low profits and a low rate of interest do not match. One or the other must yield. But the issue was put off by the war which has for the time brought high profits and has reversed the tendency for lower rates. The element desiring that capital be created out of profits is again supreme and will probably remain so while the war lasts. But the issue, although delayed, cannot be avoided. A system of finance that depends on profits to create new capital must move in one direction while a democracy must go in another. The increase of capital as well as the expense of the war must come from high profits or from popular economy. Of the former plan all are familiar since it is the method of finance on which recent prosperity has depended. With democratic finance we are less familiar and to use it would reverse many well-established financial maxims.

Every reduction of the interest rate adds to the value of what the prosperous have and creates a sharper gulf between them and the less fortunate classes. The less the rate the more difficult is the

advance from lower to higher social ranks. It may seem that a reduced rate is of popular advantage as when the mortgage rate of interest is lowered. But the advantage is to present holders only. They gain by an increase of values while to others the difficulty of acquiring farms grows. A low rate of interest means high farm values and a growth of tenant workers. It is hard to find a locality where the rate of interest has fallen below 6 per cent without breaking up the community life of farmers and substituting in their place a much lower class of tenant farmers. The problem is not solved, however, by dealing with a specific class no matter how important they are. The real problem is what motives can be placed around a people so they will do their own saving. A 4 per cent rate will not do this. There never has been in the past much popular saving below a 6 per cent rate but even this rate may fail under the new pressure for increased consumption. While the rate which will evoke sufficient popular saving cannot be stated, the general issue may be seen by contrasting the conditions of a farming community with a 4 and an 8 per cent rate of interest. An 80 acre farm with an 8 per cent rate would be worth \$4,000 (\$50 an acre) while with a 4 per cent rate it would be worth \$8,000 (\$100 an acre). If a working man can make a net saving of \$100 a year and he must pay one fourth of the purchase money to buy a farm, he can become a land owner in 8 years if the rate of interest is 8 per cent while it will take him 18 years to save enough to buy the farm if the rate is 4 per cent, thus making the selling price \$8,000 of which he must pay one-fourth down. It is easy to see that in the first case, workers will become landholders and the standards of the community will be maintained, while in the second case the long wait will lead to discouragement and to the migration of the better workers to some other occupation. There is no way in which a unified community standard can be upheld where such high values and low rates of interest persist. A social split is sure to occur dividing the community into a leisure class and a large mass of dependent workers. The same tendencies show themselves in industrial occupations although it is not so easy to contrast the motives which operate to discourage one class and to give advantage to the other. But democracy demands the same in both cases and the solution is not different. Suppressed motives must be evoked and the obstructions to social unification set aside.

To make the bearing of these statements plain it is necessary

to define more clearly the meaning of an economic democracy. An economic aristocracy is a society where the capitalists are a self-perpetuating class distinct from the workers both in occupation and in motive. Capital once saved is perpetuated and gives to its holder advantages denied to other classes. Low rates of interest with extraordinary inducements for individual enterprise are the basis of this condition. The high personal rewards give the basis of large fortunes and the low rates of interest stop the growth of competing capital. In contrast to these conditions a democratic economy is one in which privileges do not endure. All personal advantage is slowly reduced so that in time any family or class loses its industrial superiority and sinks back to the common level from which it must take a fresh start if its advantages are to be renewed. From shirt sleeve to shirt sleeve in three generations is an old adage which has a social significance if it means that the superior energy of one generation does not lift a family into a self-perpetuating leisure class. The adage implies that the descendants will be extravagant and thus lose their superiority. Socially, however, the advantage should not be lost in this way but by conditions which prevent the self-perpetuation of capital. This self-perpetuation is now favored because it is believed to be the only means by which an adequate supply of capital can be obtained. But the need of this perpetuation depends on the rate at which new capital is secured. Low rates of interest check the increase of new capital while high rates encourage it. The problem of democratic finance is to get a rate of interest which will produce a growth of new capital large enough to supply an increasing industry and to replace the decrease which is actually taking place in old capital. If, for example, old capital decreased at the rate of 2 per cent a year while an increase of 3 per cent a year was demanded to supply the increasing need of industry, the annual increase of new capital must be at least 5 per cent a year. If this condition were brought about, we would have democratic finance and the permanence of class distinctions would cease. Everyone would be permitted to gain whatever advantages his superior advantages permitted but what he left to his heirs would not be a self-perpetuating fund; it would be merely an annuity which would finally disappear.

The difficulty is not in preventing this self-perpetuation, but to secure the requisite capital to take its place. We now think of

capital as a permanent fund and do not realize how an industrial system could work without it. The advantage of capital now seems to lie in elevating one's family into the leisure class. A democratic view would not be this but the creation of a period of economic leisure for one's old age. We realize the advantage of limiting the hours of labor in each day, but we do not in a similar way see the advantage of limiting the years of labor. We stop work at 5 p.m. but we do not stop industrial activity at sixty. This lack of a social concept is largely due to the shortness of life in the past and to its uncertainty. Just as men were glad to get work they were glad to work until they dropped dead. The decrease of disease and the growth of sounder views of life permit us to think of a thirty-year working period as we now think of an eight-hour day. Should this view become prevalent a new attitude about saving would result. Men would save freely during their working period and spend freely in their old age. Their capital would become an annuity and not a permanent fund. Each generation would supply the capital for its successor who in turn would save for those which follow. A continuous destruction and replacement of capital would result with no permanent class enjoying its advantage. The old would lend to the young and the young would save for their old age leisure.

The longer life and the better living are now realities and will engage more attention no matter what financial system we use. The choice is between low rates of interest with a permanent leisure class and high rates with democratic saving by the whole population. The heredity of the upper and lower classes are not different. It is conditions which evoke saving habits and they may be made general by calling them into activity with the proper inducements. When a region is new and capital scarce, there is no difficulty to arouse the proper amount of saving. It is when the inducement fails because of low interest rates that the division into classes appears. If taxation had prevented this self-perpetuation of capital the general inclination to save would have continued and fresh capital would have appeared each year to replace that lost by taxation.

A democratic society must think more of its health, more of the length of life and more of leisure both in old age and from day to day. It must be a working organization active and efficient but it cannot afford to be 100 per cent efficient in work and only 20 per cent efficient in its amusement, recreation and leisure. Production

and consumption must complement each other and each bring its joys. Democracy is a many-sided life and not an alley leading to a single goal.

These statements I assume will be accepted in a vague way by most people who read them. We have become so used to the presentation of Utopias that we read of them with pleasure and forget them with equal readiness. It is only as they are transformed into facts that they become realities for the realization of which practical plans may be devised. I shall try to do this by presenting figures which show how the ends desired may be reached. We must begin this with a study of the prosperous for it is with changes in their attitudes that we are mainly concerned. We are as a class quite willing to lecture the workers but we do not take home the lessons taught. Many budgets have been presented of workers and we know fairly well of the merits and defects of their expenditure. We lack a like picture of the upper middle class whose expenditures are more than any other factor the cause of the present situation and the obstacle to its improvement. I shall present not the usual budget of the workers which visualizes the minimum of necessities needed by working families, but a budget of those whose expenditures represent the lower limit of good living. These "good liver" represent the tendencies of the prosperous and the pressure to spend forced on them by the social life they enjoy. In the cost of an automobile I have included depreciation charges. A \$1,200 automobile run by the owner will cost him \$300 a year on this basis. The rule for wise insurance is that the income to be derived from it should equal half the family income.

THE MINIMUM OF GOOD LIVING

ANNUAL BUDGET

Rent.....	\$800	Summer expenses.....	300
Automobile.....	300	Amusement.....	200
Service.....	300	Generosity.....	200
Clothing.....	300	Taxes.....	100
Food.....	600	Extras.....	200
Household expenses.....	100		
Insurance.....	600	Total.....	\$4,000

The defect in this budget is not from the personal but from the social viewpoint. The comforts of life are provided for but there is no pressure to encourage thrift. Such a standard is therefore in-

complete and undemocratic. It is incomplete in that the thrift instinct must be aroused to make a normal man. A thriftless man is as liable to degeneration as is a man who does not work. Such families, however pleasant and wholesome, sink in intelligence and vital power. They are also undemocratic because if they do not save there must be a capitalistic class to perform this function, and back of them, a predatory class to amass the fortunes which the capitalist class inherit. Only when energy and thrift are combined and simultaneously evoked, will a democratic family appear which is thus independent and self-determining. To bring this about a thrift item must be added to their budget and thrift motives evoked by a sufficing rate of interest.

The working epoch of each man should be followed by a period of leisure in old age. During the working period he saves, in old age he spends. What sum of annual saving will give a thirty-year period of work and saving coupled with a period of twenty years' leisure in old age? If the sum of this saving sufficed to keep up the capital of the country there would then be a replacing capital instead of the permanent fund now sought. There could then be fresh capital saved each generation to replace the spending of their predecessors of the past generation. Capital in one sense would be permanent for enough would always be at hand, but it would be temporary in the sense that the capital of each generation would go as they go. To bring this about would demand an annual saving of \$400 a year if the rate of interest remained at 4 per cent while an annual saving of \$200 a year would suffice if the rate of interest was 8 per cent. It is plain that \$400 a year of saving would exceed present possibilities while a saving of \$200 a year is practicable. If the actual return on capital is now 8 per cent there is no external obstacle to an unified democratic society. It is the thrift-pressure which we need and this cannot be evoked while the rate of interest remains at 4 per cent.

Such a picture the reader may regard as picturesque if he will. It is not this which I have primarily in mind but to show the dilemma in which the nation is at the present time. We have had in the past a society more or less predatory in its nature. The gains of the few were at the expense of the many and out of these gains came the capital of the nation. The "good liver" is an adjunct and completed product of this epoch. But against this régime the people

have of late revolted and pressure has been put in ways which have reduced profits. However, capital came from these high profits and with their reduction comes a failure to supply the capital needed for industrial enterprise. This restrictive economy is thus bound to fail. The check to the increase of capital must be obviated either by a return to the epoch of high individual profit or by pushing on to a more democratic society in which the people do their own saving. Such a choice the American people face and to which they will turn I cannot say. But I can say that a policy of restriction will not work. I can also say that a more fully democratic society is a practical expedient if the mental attitude of the people is altered to meet the new situation. The struggle of coming years is thus not a struggle with nature but a struggle of conflicting motives. Our democratic ideals may become real forces, or a keen desire for good living may keep active the forces on which our social class distinctions depend.

DOCUMENTS AND STATISTICS PERTINENT TO CURRENT RAILROAD PROBLEMS

COMPILED BY C. H. CRENNAN,

Assistant Professor of Economics, University of Pennsylvania,

AND

W. E. WARRINGTON,

Instructor in Commerce and Transportation, University of Pennsylvania

I

POSSESSION AND CONTROL OF RAIL AND WATER TRANSPORTATION SYSTEMS

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

WHEREAS the Congress of the United States, in the exercise of the constitutional authority vested in them, by joint resolution of the Senate and House of Representatives, bearing date April 6, 1917, resolved:

That the state of war between the United States and the Imperial German Government which has thus been thrust upon the United States is hereby formally declared; and that the President be, and he is hereby, authorized and directed to employ the entire naval and military forces of the United States and the resources of the Government to carry on war against the Imperial German Government; and to bring the conflict to a successful termination, all of the resources of the country are hereby pledged by the Congress of the United States.

And by joint resolution bearing date of December 7, 1917, resolved:

That a state of war is hereby declared to exist between the United States of America and the Imperial and Royal Austro-Hungarian Governments and that the President be, and he is hereby, authorized and directed to employ the entire naval and military forces of the United States and the resources of the Government to carry on war against the Imperial and Royal Austro-Hungarian Government; and to bring the conflict to a successful termination, all the resources of the country are hereby pledged by the Congress of the United States.

And whereas it is provided by section 1 of the Act approved August 29, 1916, entitled "An Act making appropriations for the support of the Army for the fiscal year ending June 30, 1917, and for other purposes," as follows:

The President, in time of war, is empowered, through the Secretary of War, to take possession and assume control of any system or systems of transportation, or any part thereof, and to utilize the same, to the exclusion as far as may be necessary of all other traffic thereon, for the transfer or transportation of troops, war material and equipment, or for such other purposes connected with the emergency as may be needful or desirable.

And whereas it has now become necessary in the national defense to take possession and assume control of certain systems of transportation and to utilize the same, to the exclusion as far as may be necessary of other than war traffic thereon, for the transportation of troops, war material and equipment therefor, and for other needful and desirable purposes connected with the prosecution of the war;

NOW, THEREFORE, I, WOODROW WILSON, President of the United States, under and by virtue of the powers vested in me by the foregoing resolutions and statute, and by virtue of all other powers thereto me enabling, do hereby, through Newton D. Baker, Secretary of War, take possession and assume control at 12 o'clock noon on the twenty-eighth day of December, 1917, of each and every system of transportation and the appurtenances thereof located wholly or in part, within the boundaries of the continental United States and consisting of railroads, and owned or controlled systems of coastwise and inland transportation, engaged in general transportation, whether operated by steam or by electric power, including also terminals, terminal companies and terminal associations, sleeping and parlor cars, private cars and private car lines, elevators, warehouses, telegraph and telephone lines and all other equipment and appurtenances commonly used upon or operated as a part of such rail or combined rail and water systems of transportation;—to the end that such systems of transportation be utilized for the transfer and transportation of troops, war material and equipment, to the exclusion so far as may be necessary of all other traffic thereon; and that so far as such exclusive use be not necessary or desirable, such systems of transportation be operated and utilized in the performance of such other services as the national interest may require and of the usual and ordinary business and duties of common carriers.

It is hereby directed that the possession, control, operation and utilization of such transportation systems hereby by me undertaken shall be exercised by and through William G. McAdoo, who is hereby appointed and designated Director General of Railroads. Said Director may perform the duties imposed upon him, so long and to such extent as he shall determine, through the Boards of Directors, Receivers, officers and employees of said systems of transportation. Until and except so far as said Director shall from time to time by general or special orders otherwise provide, the Boards of Directors, Receivers, officers and employees of the various transportation systems shall continue the operation thereof in the usual and ordinary course of the business of common carriers, in the names of their respective companies.

Until and except so far as said Director shall from time to time otherwise by general or special orders determine, such systems of transportation shall remain subject to all existing statutes and orders of the Interstate Commerce Commission, and to all statutes and orders of regulating commissions of the various states in which said systems or any part thereof may be situated. But any orders, general or special, hereafter made by said Director, shall have paramount authority and be obeyed as such.

Nothing herein shall be construed as now affecting the possession, operation and control of street electric passenger railways, including railways commonly called interurbans, whether such railways be or be not owned or controlled by such railroad companies or systems. By subsequent order and proclamation, if

and when it shall be found necessary or desirable, possession, control or operation may be taken of all or any part of such street railway systems, including subways and tunnels; and by subsequent order and proclamation possession, control and operation in whole or in part may also be relinquished to the owners thereof of any part of the railroad systems or rail and water systems, possession and control of which are hereby assumed.

The Director shall as soon as may be after having assumed such possession and control enter upon negotiations with the several companies looking to agreements for just and reasonable compensation for the possession, use and control of their respective properties on the basis of an annual guaranteed compensation, above accruing depreciation and the maintenance of their properties, equivalent, as nearly as may be, to the average of the net operating income thereof for the three year period ending June 30, 1917,—the results of such negotiations to be reported to me for such action as may be appropriate and lawful.

But nothing herein contained, expressed or implied, or hereafter done or suffered hereunder, shall be deemed in any way to impair the rights of the stockholders, bondholders, creditors and other persons having interests in said systems of transportation or in the profits thereof, to receive just and adequate compensation for the use and control and operation of their property hereby assumed.

Regular dividends hitherto declared, and maturing interest upon bonds, debentures and other obligations, may be paid in due course; and such regular dividends and interest may continue to be paid until and unless the said Director shall from time to time otherwise by general or special orders determine; and, subject to the approval of the Director, the various carriers may agree upon and arrange for the renewal and extension of maturing obligations.

Except with the prior written assent of said Director, no attachment by mesne process or on execution shall be levied on or against any of the property used by any of said transportation systems in the conduct of their business as common carrier; but suits may be brought by and against said carriers and judgments rendered as hitherto until and except so far as said Director may, by general or special orders, otherwise determine.

From and after twelve o'clock on said twenty-eighth day of December, 1917, all transportation systems included in this order and proclamation shall conclusively be deemed within the possession and control of said Director without further act or notice. But for the purpose of accounting said possession and control shall date from twelve o'clock midnight on December 31, 1917.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

DONE by the President, through Newton D. Baker, Secretary of War, in the District of Columbia, this 26th day of December, in the year of
 [SEAL.] our Lord one thousand nine hundred and seventeen, and of the independence of the United States the one hundred and forty-second.

WOODROW WILSON

By the President:

ROBERT LANING,
Secretary of State.

NEWTON D. BAKER,
Secretary of War.

[No. 1419.]

II

THE PRESIDENT'S ADDRESS TO CONGRESS ON FEDERAL
CONTROL OF RAILROADS, JANUARY 4, 1918

Gentlemen of the Congress: |

I have asked the privilege of addressing you in order to report that on the 28th of December last, during the recess of Congress, acting through the Secretary of War and under the authority conferred upon me by the act of Congress approved August 29, 1916, I took possession and assumed control of the railway lines of the country and the systems of water transportation under their control. This step seemed to be imperatively necessary in the interest of public welfare, in the presence of the great tasks of war with which we are now dealing. As our experience develops difficulties and makes it clear what they are, I have deemed it my duty to remove those difficulties wherever I have the legal power to do so. To assume control of the vast railway systems of the country is, I realize, a very great responsibility, but to fail to do so in the existing circumstances would have been a much greater. I assumed the lesser responsibility rather than the weightier.

I am sure that I am speaking the mind of all thoughtful Americans when I say that it is our duty as the representatives of the nation to do everything that is necessary to do to secure the complete mobilization of the whole resources of America by as rapid and effective a means as can be found. Transportation supplies all the arteries of mobilization. Unless it be under a single and unified direction, the whole process of the nation's action is embarrassed.

It was in the true spirit of America, and it was right, that we should first try to effect the necessary unification under the voluntary action of those who were in charge of the great railway properties; and we did try it. The directors of the railways responded to the need promptly and generously. The group of railway executives who were charged with the task of actual coordination and general direction performed their duties with patriotic zeal and marked ability, as was to have been expected, and did, I believe, everything that it was possible for them to do under the circumstances. If I have taken the task out of their hands, it has not been because of any dereliction or failure on their part, but only because there were some things which the government can do and private management cannot. We shall continue to value most highly the advice and assistance of these gentlemen, and I am sure we shall not find them withholding it.

It had become unmistakably plain that only under government administration can the entire equipment of the several systems of transportation be fully and unreservedly thrown into a common service without injurious discrimination against particular properties. Only under government administration can an absolutely unrestricted and unembarrassed common use be made of all tracks, terminals, terminal facilities and equipment of every kind. Only under that authority can new terminals be constructed and developed without regard to the requirements or limitations of particular roads. But under government administration all these things will be possible, not instantly, but as fast as practical difficulties, which cannot be merely conjured away, give way before the new management.

The common administration will be carried out with as little disturbance

of the present operating organizations and personnel of railways as possible. Nothing will be altered or disturbed which it is not necessary to disturb. We are serving the public interest and safeguarding the public safety, but we are also regardless of the interest of those by whom these great properties are owned and glad to avail ourselves of the experience and trained ability of those who have been managing them.

It is necessary that the transportation of troops and of war materials, of food and of fuel, and of everything that is necessary for the full mobilization of the energies and resources of the country, should be first considered, but it is clearly in the public interest also that the ordinary activities and the normal industrial and commercial life of the country should be interfered with and dislocated as little as possible, and the public may rest assured that the interest and convenience of the private shipper will be as carefully served and safeguarded as it is possible to serve and safeguard it in the present extraordinary circumstances.

While the present authority of the executive suffices for all purposes of administration, and while, of course, all private interests must for the present give way to the public necessity, it is, I am sure you will agree with me, right and necessary that the owners and creditors of the railways, the holders of their stocks and bonds, should receive from the government an unqualified guarantee that their properties will be maintained throughout the period of federal control in as good repair and as complete equipment as at present, and that the several roads will receive under federal management such compensation as is equitable and just alike to their owners and to the general public. I would suggest the average net railway operating income of the three years ending June 30, 1917. I earnestly recommend that these guarantees be given by appropriate legislation and given as promptly as circumstances permit.

I need not point out the essential justice of such guarantees and their great influence and significance as elements in the present financial and industrial situation of the country. Indeed, one of the strong arguments for assuming control of the railroads at this time is the financial argument.

It is necessary that the values of railway securities should be justly and fairly protected, and that the large financial operations every year necessary in connection with the maintenance, operation and development of the roads should, during the period of the war, be wisely related to the financial operations of the government. Our first duty is, of course, to conserve the common interest and the common safety and to make certain that nothing stands in the way of the successful prosecution of the great war for liberty and justice, but it is an obligation of public conscience and of public honor that the private interests we disturb should be kept safe from unjust injury, and it is of the utmost consequence to the government itself that all great financial operations should be stabilized and coordinated with the financial operations of the government.

No borrowing should run athwart the borrowings of the federal treasury, and no fundamental industrial values should anywhere be unnecessarily impaired. In the hands of many thousands of small investors in the country, as well as in national banks, in insurance companies, in savings banks, in trust companies, in financial agencies of every kind, railway securities, the sum total of which runs up

to some ten or eleven thousand millions, constitute a vital part of the structure of credit, and the unquestioned solidity of that structure must be maintained.

The Secretary of War and I easily agreed that, in view of the many complex interests which must be safeguarded and harmonized, as well as because of his exceptional experience and ability in this new field of governmental action, the Hon. William G. McAdoo was the right man to assume direct administrative control of this new executive task. At our request, he consented to assume the authority and duties of organizer and director general of the new railway administration. He has assumed those duties and his work is in active progress.

It is probably too much to expect that even under the unified railway administration which will now be possible sufficient economies can be effected in the operation of the railways to make it possible to add to their equipment and extend their operative facilities as much as the present extraordinary demands upon their use will render desirable without resorting to the national treasury for the funds. If it is not possible, it will, of course, be necessary to resort to the Congress for grants of money for that purpose.

The Secretary of the Treasury will advise with your committees with regard to this very practical aspect of the matter. For the present, I suggest only the guarantees I have indicated and such appropriations as are necessary at the outset of this task. I take the liberty of expressing the hope that the Congress may grant these promptly and ungrudgingly. We are dealing with great matters and will, I am sure, deal with them greatly.

III

OFFICIAL ORDERS OF DIRECTOR GENERAL McADOO¹

ORDER No. 1

December 29, 1917.

Pursuant to the order of the President of the United States, through the Secretary of War, the undersigned, as Director General of Railroads, has taken possession and assumed control of certain transportation systems described in the Proclamation of the President, of which Proclamation and Order officers, agents and employees of said transportation systems are to take immediate and careful notice. In addition to the provisions therein contained, it is,

Until Further Order, Directed That:

1. All officers, agents and employees of such transportation systems may continue in the performance of their present regular duties, reporting to the same officers as heretofore and on the same terms of employment.
2. Any officer, agent or employee desiring to retire from his employment shall give the usual and seasonable notice to the proper officer to the end that there may be no interruption or impairment of the transportation service required for the successful conduct of the war and the needs of general commerce.

¹ Official orders issued by the Director General of Railroads up to the time this volume went to press.

3. All transportation systems covered by said Proclamation and Order shall be operated as a national system of transportation, the common and national needs being in all instances held paramount to any actual or supposed corporate advantage. All terminals, ports, locomotives, rolling stock and other transportation facilities are to be fully utilized to carry out this purpose without regard to ownership.

4. The designation of routes by shippers is to be disregarded when speed and efficiency of transportation service may thus be promoted.

5. Traffic agreements between carriers must not be permitted to interfere with expeditious movements.

6. Through routes which have not heretofore been established because of short hauling or other causes, are to be established and used whenever expedition and efficiency of traffic will thereby be promoted; and if difficulty is experienced in such through routing, notice thereof shall by carriers or shippers or both be given at once to the Director by wire.

7. Existing schedules of rates and outstanding orders of the Interstate Commerce Commission are to be observed, but any such schedules of rates or orders as may hereafter be found to conflict with the purposes of said Proclamation or with this order shall be brought immediately by wire to the attention of the Director.

GENERAL ORDER No. 2

To the Chief Executives of the Railroads:

Pursuant to the authority vested in me by the President of the United States in his proclamation of December 26, 1917, wherein it was stated that for purposes of accounting, possession and control of the railroads shall date from 12 o'clock midnight on December 31, 1917, you are notified that, until otherwise directed, no changes in the present methods of accounting as prescribed by the Interstate Commerce Commission will be required. The accounts of your respective companies shall be closed as of December 31, 1917, and opened as of January 1, 1918, in the same manner as they have heretofore been handled at the close of one fiscal period and the beginning of another; and in the same manner that you should have handled your accounts had the government not taken possession and control

ORDER No. 3

All carriers by railroad, subject to the jurisdiction of the undersigned, are hereby ordered and directed forthwith to publish and file, and to continue in effect until further order, tariffs effective January 21, 1918, wherein demurrage rules, regulations and charges shall be changed so as to provide.

A. (1) Forty-eight hours' (two days) free time for loading or unloading on all commodities.

(2) Twenty-four hours' (one day) free time on cars held for any other purpose permitted by tariff.

B. Demurrage charges per car per day or fraction of a day until car is released, as follows: \$3.00 for the first day, \$4.00 for the second day, and for each succeeding additional day the charge to be increased \$1.00 in excess of that for the preceding day until a maximum charge of \$10.00 per car per day shall be reached

on the eighth day of detention beyond free time, the charge thereafter to be \$10.00 per car per day or fraction thereof. These charges will supersede all those named in existing tariffs applicable to domestic freight, and specifically contemplate the cancellation of all average agreement provisions of existing tariffs.

No change is authorized hereby to be made in demurrage rules, regulations and charges applying on foreign export freight awaiting ships at export points.

Upon my request, the Interstate Commerce Commission has issued Fifteenth Section Order No. 225² authorizing the filing of tariffs to accord with this order to become effective January 21, 1918, on one day's notice.

Carriers shall immediately file said tariffs with appropriate state commissions or other state authorities.

Dated at Washington, this fifth day of January, 1918.

*** FIFTEENTH SECTION ORDER NO. 225**

At a Session of DIVISION 2 of the INTERSTATE COMMERCE COMMISSION, held at its office in Washington, D. C., on the 5th day of January, A. D. 1918.

EDGAR E. CLARK,	} Commissioners.
WINTHROP M. DANIELS,	
ROBERT W. WOOLLEY,	

Application under Section 15 of the Act to Regulate Commerce, as amended August 9, 1917, for approval for filing of an increased rate, fare, charge, or classification.

Demurrage Rules, Regulations and Charges

The Director General of Railroads having requested the Commission's approval for filing tariffs containing changes in demurrage rules, regulations and charges in compliance with his order No. 3 of January 5, 1918, effective January 21, 1918, so as to provide as follows:

"A. (1) Forty-eight hours' (two days) free time for loading or unloading on all commodities.

(2) Twenty-four hours' (one-day) free time on cars held for any other purpose permitted by tariff.

B. Demurrage charges per car per day or fraction of a day until car is released, as follows: \$3.00 for the first day, \$4.00 for the second day, and for each succeeding additional day the charge to be increased \$1.00 in excess of that for the preceding day until a maximum charge of \$10.00 per car per day shall be reached on the eighth day of detention beyond free time, the charge thereafter to be \$10.00 per car per day or fraction thereof. These charges will supersede all those named in existing tariffs applicable to domestic freight, and specifically contemplate the cancellation of all average agreement provisions of existing tariffs.

No change is authorized hereby to be made in demurrage rules, regulations and charges applying on foreign export freight awaiting ships at export points."

It is ordered, That the rules, regulations and charges herein above set forth be, and they are hereby, approved for filing, without formal hearing, which approval shall not affect any subsequent proceeding relative thereto;

It is further ordered, That said tariffs may be filed, effective January 21st, 1918, upon not less than one (1) day's notice to the Commission and to the general public in the manner prescribed in Section 6 of the Act to Regulate Commerce;

And it is further ordered, That the tariffs filed under authority of this order shall bear on title pages thereof the following notation:

Increased demurrage rules, regulations and charges in this tariff are filed on one day's notice under authority of the Interstate Commerce Commission's Fifteenth Section Order No. 225 of January 5, 1918, without formal hearing, which approval shall not affect any subsequent proceeding relative thereto.

By the Commission, Division 2:

[SEAL]

GEORGE B. MCGINTY,
Secretary.

GENERAL ORDER No. 4

January 18, 1918.

For purposes of operation the railroads of the United States will be classified as Eastern Railroads, Southern Railroads and Western Railroads, defined as follows:

Eastern Railroads—The railroads in that portion of the United States north of the Ohio and Potomac rivers and east of Lake Michigan and the Indiana-Illinois state lines; also those railroads in Illinois extending into that state from points east of the Indiana-Illinois state line; also the Chesapeake & Ohio, the Norfolk & Western and the Virginian railways.

Southern Railroads—All railroads in that portion of the United States south of the Ohio and Potomac rivers and east of the Mississippi River, except the Chesapeake & Ohio, Norfolk & Western and the Virginian railways; and also those railroads in Illinois and Indiana extending into those states from points south of the Ohio River.

Western Railroads—All railroads not included in the above definitions and, broadly speaking, all railroads in the territory west of Lake Michigan and of the Indiana-Illinois state line to the Ohio River and west of the Mississippi River from the Ohio River to the Gulf of Mexico, excepting those railroads in Illinois included in Eastern Territory, and those railroads in Illinois and Indiana included in Southern Territory, as above stated.

Mr. A. H. Smith, President of the New York Central, is appointed Regional Director, with office at New York, in charge of the operation of Eastern Railroads.

Mr. C. H. Markham, President of the Illinois Central, is appointed Regional Director, with office at Atlanta, in charge of the operation of Southern Railroads.

Mr. R. H. Ashton, President of the Chicago & North Western, is appointed Regional Director, with office at Chicago, in charge of the operation of Western Railroads.

Orders issued by the gentlemen named in their capacity as Regional Directors will be issued by authority of the Director General and will be respected accordingly.

GENERAL ORDER No. 5

Pursuant to the authority vested in me as Director General of Railroads by the President of the United States in his proclamation of December 26, 1917, I hereby create a Railroad Wage Commission and name as the members thereof, Franklin K. Lane, Secretary of the Interior; Charles C. McChord, member of the Interstate Commerce Commission; J. Harry Covington, Chief Justice of the Supreme Court of the District of Columbia and William R. Willcox of New York.

It is Ordered and Directed that:

The Commission shall make a general investigation of the compensation of persons in the railroad service, the relation of railroad wages to wages in other industries, the conditions respecting wages in different parts of the country, the special emergency respecting wages which exists at this time owing to war conditions and the high cost of living, as well as the relation between different classes of railroad labor.

The Commission shall begin its labors at once, and make report to the Director General, giving its recommendations in general terms as to changes in existing compensations that should be made.

Officers, agents and employees of the railroads are directed to furnish to the Railroad Wage Commission upon request all information it may require in the course of its investigations.

GENERAL ORDER No. 6*

January 28, 1918.

To Officers and Directors of Railroad Companies:

During the period of possession, operation, and government control of railroads, it is necessary that officers, directors, and agents of railroad companies be very careful in the handling of moneys and in the dealing with transportation matters. Without attempting at this time to give general directions, there are a few matters involving the expenditure of moneys for purposes having no direct relation to transportation, which should receive immediate attention; as well as the issuance of free transportation.

It is therefore ordered that the carriers' operating revenues shall not be expended:

1. For the payment of agents or other persons who are employed in any way to affect legislation.
2. For the employment of attorneys who are not actually engaged in the performance of necessary legal work for the company.
3. For the payment of the expenses of persons or agencies constituting associations of carriers unless such association is approved in advance by the Director General.
4. For any political purpose or to directly or indirectly influence the election of any person or an election affecting any public measure.

Issuance of Free Passes

No passes or free transportation shall be issued by any carrier under federal control or any official of such carrier unless the issuance of such free transportation is expressly authorized by the Act of Congress entitled "An Act to Regulate Commerce, Approved February 4, 1887, and Amendments thereto"; and any such passes or free transportation heretofore issued not in conformity with said act must be recalled.

This order applies to all carriers under federal control, whether interstate or intrastate.

*NOTE—Since this volume went to press, Order No. 7 and Fifteenth Section Order No. 300, *in re* National and Car Demurrage Rules, Regulations and Charges have been issued. Copies of these orders may be secured from the office of the Director General of Railroads, Washington, D. C., upon application.

IV

RAILROAD STATISTICS

These statistics, not generally accessible, are offered for two purposes:

- (1) To afford a basis for an understanding of the task confronting the Director General.
- (2) To enable the reader to picture for himself something of the change in the railroad situation which has taken place during the war period. (Wherever possible official figures are given for the fiscal years 1914-15-16; analysis of operating income covers the period 1891-1917 inclusive.)

For a clear understanding of the tables, terms frequently appearing should be defined. As designated by the Interstate Commerce Commission, Class I roads are those having annual operating revenues above \$1,000,000; Class II roads are those having annual operating revenues from \$100,000 to \$1,000,000; and Class III roads are those having annual operating revenues below \$100,000. Each reporting carrier is assigned to that district in which the major part of its operations lies or with which it seems most closely allied in character, and no arbitrary subdivisions or apportionments are made of the returns of any carrier. The three districts may be defined substantially as follows: The Eastern District comprises that portion of the United States bounded on the west by the northern and western shore of Lake Michigan to Chicago, thence by a line to Peoria, thence to East St. Louis, thence down the Mississippi River to the mouth of the Ohio River, and on the south by the Ohio River from its mouth to Parkersburg, W. Va.; thence by a line to the southwestern corner of Maryland; thence by the Potomac River to its mouth. The Southern District comprises that portion of the United States bounded on the north by the Eastern District and on the west by the Mississippi River. The remainder of the United States, exclusive of Alaska and of island possessions, is included in the Western District.¹

The statistical bibliography appended will make available further sources of information necessary for a complete picture of the railroads of the United States.

¹ *Statistics of Railways in the United States 1914*, Interstate Commerce Commission, p. 10.

TABLE 1. NUMBER OF RAILROADS IN THE UNITED STATES IN 1914 CLASSIFIED
ACCORDING TO ORGANIZATION FOR OPERATION*

Class	Number
Operating roads:	
Independent.....	818
Subsidiary	
Fixed rent.....	6
Contingent rent.....	1
Other relation.....	287
No information.....	....
Private.....	185
Total operating roads.....	<u>1,297</u>
Non-operating roads:	
Subsidiary	
Fixed rent.....	323
Contingent rent.....	107
Other relation.....	273
No information.....	....
Private.....	21
"Line owned" not in operation	
Independent.....	64
Subsidiary.....	4
Private.....	16
Total non-operating roads.....	<u>808</u>
Total number of roads.....	<u>2,105</u>

*Latest official figures available. Statistics of Railways in the U.S. 1914, I. C. C., p. 15. Does not include roads classified as switching and terminal.

TABLE 2. MILES OF RAILWAY TRACKS ON JUNE 30, 1914, COVERED BY REPORTS OF OPERATIONS*

Class of roads and territory covered	Single (or first) track	Second track	Third track	Fourth track, etc.	Yard track and sidings	Total mileage operated (all tracks)
Class I roads:	<i>Miles</i>	<i>Miles</i>	<i>Miles</i>	<i>Miles</i>	<i>Miles</i>	<i>Miles</i>
Eastern District.....	¹ 58,666.64	² 16,161.10	2,414.82	1,770.04	³ 38,461.37	⁴ 117,473.97
Southern District.....	42,055.36	3,142.99	43.70	157.08	14,846.61	60,245.74
Western District.....	⁵ 126,377.20	⁶ 8,074.95	231.94	143.71	⁷ 40,086.19	⁸ 174,813.90
Total.....	⁹ 226,999.20	¹⁰ 27,379.04	2,690.46	2,070.83	¹¹ 93,394.17	¹² 353,533.70
Class II roads:						
Eastern District.....	4,421.58	202.19	5.57	.62	1,333.41	5,963.37
Southern District.....	4,711.12	3.02	.....	.....	648.10	5,362.24
Western District.....	11,265.09	19.87	.....	.....	1,957.58	13,243.14
Total.....	20,398.39	225.08	5.57	.62	3,939.09	24,568.75
Class III roads:						
Eastern District.....	1,382.81	.48	.....	.....	264.56	2,117.85
Southern District.....	2,903.91	3.40	.....	.....	234.31	3,141.62
Western District.....	4,392.79	.66	.....	.....	452.94	4,846.39
Total.....	9,149.51	4.54	.....	.....	951.81	10,105.86
All operating roads:						
Eastern District.....	¹ 64,941.03	² 6,363.77	2,420.89	1,770.66	³ 40,059.34	⁴ 125,555.19
Southern District.....	49,070.39	3,149.41	43.70	157.08	15,729.02	68,749.60
Western District.....	⁵ 141,935.68	⁶ 8,095.48	231.94	143.71	⁷ 42,496.71	⁸ 192,903.52
United States, 1914 ...	⁹ 256,547.10	¹⁰ 27,608.66	2,696.03	2,071.45	¹¹ 98,285.07	¹² 387,208.31

* Does not include mileage of switching and terminal companies.

¹ Includes 1,209.10 miles lying in Canada.

² Includes 480.24 miles lying in Canada.

³ Includes 495.45 miles lying in Canada.

⁴ Includes 2,184.79 miles lying in Canada.

⁵ Includes 731.53 miles lying in Canada and 51.67 miles lying in Mexico.

⁶ Includes 7.12 miles lying in Canada.

⁷ Includes 106.89 miles lying in Canada and 11.22 miles lying in Mexico.

⁸ Includes 845.54 miles lying in Canada and 62.89 miles lying in Mexico.

⁹ Includes 1,940.63 miles lying in Canada, and 51.67 miles lying in Mexico.

¹⁰ Includes 487.36 miles lying in Canada.

¹¹ Includes 602.34 miles lying in Canada and 11.22 miles lying in Mexico.

¹² Includes 3,030.33 miles lying in Canada and 62.89 miles lying in Mexico.

Twenty-seventh Annual Report on the Statistics of Railways in the United States for the year ended June 30, 1914, p. 13.

TABLE 2, (continued) MILES OF RAILWAY TRACKS ON JUNE 30, 1915, COVERED BY REPORTS OF OPERATIONS*

Class of carriers and territory covered	Road	Second main track	Third main track	All other main tracks	Yard track and sidings	Total all tracks
Class I carriers:	<i>Miles</i>	<i>Miles</i>	<i>Miles</i>	<i>Miles</i>	<i>Miles</i>	<i>Miles</i>
Eastern District.....	¹ 58,911.63	16,442.92	2,405.17	1,769.55	38,966.54	¹ 118,495.81
Southern District.....	42,186.41	3,446.68	42.76	244.81	15,103.58	61,024.24
Western District.....	² 127,890.99	3,554.68	261.42	267.86	41,024.66	² 177,999.61
Total.....	³ 228,989.03	23,444.28	2,709.35	2,282.22	95,094.78	³ 357,519.66
Class II carriers:						
Eastern District.....	⁴ 4,420.01	170.72	4.95	.....	1,296.24	⁴ 5,891.92
Southern District.....	4,843.59	4.84	.....	.....	714.63	5,562.56
Western District.....	10,361.93	20.54	.....	20.84	1,590.37	12,293.68
Total.....	⁴ 19,625.53	195.60	4.95	20.84	3,901.24	⁴ 23,748.16
Class III carriers:						
Eastern District.....	1,778.06	.73	.....	.....	274.27	2,053.06
Southern District.....	2,864.33	3.40	.....	.....	208.54	3,076.27
Western District.....	4,312.37	.66	.....	.....	431.33	4,744.36
Total.....	8,954.76	4.79	.....	.....	914.14	9,873.69
Classes I, II, and III carriers:						
Eastern District.....	⁵ 65,109.70	16,614.37	2,410.12	1,769.55	40,537.05	⁵ 126,440.79
Southern District.....	49,894.33	3,454.42	42.76	244.81	16,026.75	69,663.07
Western District.....	² 142,565.29	3,575.88	261.42	288.70	43,346.36	² 196,037.65
United States, 1915 ...	⁶ 257,569.32	23,644.67	2,714.30	2,303.06	99,910.16	⁶ 391,141.51
United States, 1914 ...	⁷ 256,547.10	⁸ 27,608.66	2,696.03	2,071.45	⁹ 98,285.07	¹⁰ 387,208.31
United States, 1913 ...	¹¹ 253,470.20	¹² 26,273.79	2,588.68	1,964.06	¹³ 95,211.41	¹⁴ 379,508.14
United States, 1912 ...	¹⁵ 249,852.06	24,951.65	2,511.76	1,903.32	92,019.13	371,237.92
United States, 1911 ...	¹⁶ 246,238.02	23,451.26	2,414.16	1,747.10	88,973.95	362,824.49
United States, 1910 ...	¹⁷ 240,830.75	21,658.74	2,206.39	1,488.78	85,581.93	351,766.59
United States, 1909 ...	¹⁸ 235,402.09	20,949.41	2,169.55	1,453.56	82,376.63	342,351.24
United States, 1908 ...	¹⁹ 230,494.02	20,209.05	2,081.16	1,408.99	79,452.64	333,645.86

* Does not include mileage of switching and terminal companies (1,937.49 miles, main track, and 3,415.61 miles, yard track and sidings, etc.).

¹ Includes 1,155.44 miles in Canada.

² Includes 756.89 miles in Canada and 51.67 miles in Mexico.

³ Includes 1,912.33 miles in Canada, and 51.67 miles in Mexico.

⁴ Includes 54.92 miles in Canada.

⁵ Includes 1,210.36 miles in Canada.

⁶ Includes 1,967.25 miles in Canada, and 51.67 miles in Mexico.

⁷ Includes 1,940.63 miles in Canada, and 51.67 miles in Mexico.

⁸ Includes 487.36 miles in Canada.

⁹ Includes 602.34 miles in Canada, and 11.22 miles in Mexico.

¹⁰ Includes 3,090.33 miles in Canada, and 62.89 miles in Mexico.

¹¹ Includes 1,946.04 miles in Canada.

¹² Includes 470.74 miles in Canada.

¹³ Includes 519.03 miles in Canada.

¹⁴ Includes 2,935.81 miles in Canada.

¹⁵ Includes 1,870.85 miles in Canada.

¹⁶ Includes 1,761.58 miles in Canada.

¹⁷ Includes 1,384.36 miles in Canada.

¹⁸ Includes 1,343.45 miles in Canada.

¹⁹ Includes 1,290.68 miles in Canada.

TABLE 2, (continued) MILEAGE, 1916⁴

On June 30, 1916, the roads covered by this abstract represented 259,210.86 miles of line operated, including 11,856.42 miles used under trackage rights. The aggregate mileage of railway tracks of all kinds covered by operating returns for these roads was 394,944.26 miles, classified as follows:

Item	Class I roads	Class II roads	Class III roads	Total
Miles of road	231,263.98	18,913.68	9,033.20	259,210.86
Miles of second main track	28,732.50	195.84	6.87	28,935.21
Miles of third main track	2,725.58	5.04	.....	2,730.62
Miles of fourth main track	1,960.00	.....	.....	1,960.00
Miles of all other main tracks	238.34	.....	.....	238.34
Miles of yard track and sidings	97,198.95	3,716.75	953.53	101,869.23
Total, all tracks	362,119.35	22,831.31	9,993.60	394,944.26

⁴ Sources—Figures for 1914, Statistics of Railways in the United States, 1914, by the Interstate Commerce Commission, Statement No. 4, p. 13; for 1915, text of the twenty-eighth annual report on the Statistics of Railways in the United States for year ended June 30, 1915, statement No. 4, page 13; for 1916, Abstract of Statistics of Steam Railways in the United States for the year ended June 30, 1916 p. 2.

The figures above given for total mileage (all tracks), as compared with the corresponding statement for the preceding year, show an increase of 3,802.75 miles. Of this increase 1,641.54 miles were in single or first track, and 1,959.07 miles in yard track and sidings.

TABLE 3. RAILROAD GROUPS AND SYSTEMS

I. VANDERBILT INTERESTS		VI. HARRIMAN INTERESTS	
	Mileage		Mileage
Boston & Albany.....	304	Oregon Short Line.....	2,120
New York Central.....	5,208	Oregon-Washington R. R. & Nav. Co.	2,067
Lake Shore & Michigan Southern.....		Union Pacific System (remainder)...	3,615
Michigan Central.....	1,800	Southern Pacific System.....	10,397
New York, Chicago & St. Louis ¹	567	Illinois Central System.....	6,423
Lake Erie & Western.....	906	Central of Georgia.....	1,924
Big Four.....	2,361	Baltimore & Ohio System ²	4,600
Pittsburgh & Lake Erie.....	224	Delaware & Hudson Systems ³	930
Chicago, Indiana & Southern.....	359	San Pedro, Los Angeles & Salt Lake ³	1,415
Toledo & Ohio, Central.....	446	Cincinnati, Hamilton & Dayton ^{3,4} ...	1,015
Other affiliated eastern lines.....	677	Chicago & Alton ³	1,050
Western Maryland.....	661	Total.....	35,556
Chicago & Northwestern ³	10,162		
Total.....	23,675		
II. PENNSYLVANIA RAILROAD INTERESTS		VII. HILL INTERESTS	
Pennsylvania System.....	11,821	Northern Pacific.....	7,749
Norfolk & Western.....	2,013	Great Northern.....	7,870
Total.....	13,834	Chicago, Burlington & Quincy System.....	12,434
		Colorado & Southern.....	
		Total.....	28,053
III. MORGAN INTERESTS		VIII. FORMERLY CONTROLLED BY EBB-YOAKUM INTERESTS	
Erie Railroad.....	2,543	Minneapolis & St. Louis.....	1,646
Pere Marquette ¹	2,321	Toledo, St. Louis & Western ¹	451
Southern Railway System.....	8,648	Frisco System ¹	6,391
Cincinnati, New Orleans & Texas Pacific.....	337	Chesapeake & Ohio.....	2,545
Mobile & Ohio.....	1,122	Missouri, Kansas & Texas System ¹ ..	3,536
Atlantic Coast Line System.....	6,060	Hocking Valley.....	352
Louisville & Nashville.....	6,880	New Orleans, Mobile & Chicago ¹	403
Chicago Great Western.....	1,496	Total.....	15,324
Total.....	29,407		
IV. FORMERLY CONTROLLED BY GOULD INTERESTS		IX. NEW HAVEN INTERESTS	
Wabash System ¹	2,515	New York, New Haven & Hartford..	2,046
Wheeling & Lake Erie ¹	512	Boston & Maine ^{1,5}	2,302
Missouri Pacific ¹	7,294	New York, Ontario & Western.....	568
St. Louis Iron Mountain & Southern		Maine Central.....	1,209
St. Louis Southwestern ¹	1,818	Central New England.....	304
Texas & Pacific.....	1,991	Rutland ¹	468
International & Great Northern ¹	1,160	Other lines.....	208
Denver & Rio Grande.....	4,071	Total.....	7,106
Western Pacific ¹			
Total.....	19,361		
V. FORMERLY CONTROLLED BY MOORE INTERESTS		X. ATCHISON, TOPEKA & SANTA FE SYSTEM.	
Rock Island System ¹	8,330		11,546
Delaware, Lackawanna & Western ¹ ..	1,000	XI. CHICAGO, MILWAUKEE & ST. PAUL SYSTEM.....	
Lehigh Valley ¹	1,444		10,442
Total.....	10,774	XII. SEABOARD AIR LINE SYSTEM..	
			3,262
		XIII. PHILADELPHIA & READING SYSTEM.....	
			2,427
		Grand total of above groups and systems.....	
			210,766

¹ Sold to independent syndicate in 1916.² Jointly with other interests.³ Receivership, Dec. 26, 1911; sold July 21, 1915.⁴ In hands of receiver.⁵ Stock held by federal trustees pending reorganization.

Of the 253,788.64 miles of road in the United States in 1915, 210,766 miles were classified into 13 groups according to ownership. In some of the systems tabulated, financial control is not unified, the affiliation amounting to little more than the existence of harmonious mutual relations. (Table compiled by Dr. G. G. Huebner, Asst. Professor of Transportation and Commerce, Univ. of Pennsylvania; *American Year Book 1916*, page 541.)

TABLE 4. COMPARATIVE SUMMARY OF EMPLOYEES, TOTAL ALL CLASSES AND PER 100 MILES OF LINE OPERATED, AND AMOUNT OF COMPENSATION PAID RAILWAY EMPLOYEES FOR THE YEARS ENDED JUNE 30, 1914, 1915 AND 1916*

Class I Carriers

Year	Eastern District			Southern District			Western District			Total		
	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees
1914	718,998	1,226	\$620,176,941	282,418	672	\$206,219,960	638,613	506	\$510,947,234	1,640,029	722	\$1,337,844,135
1915	663,213	1,145	561,847,191	245,890	592	183,568,702	457,213	429	389,220,082	1,366,316	663	1,134,663,975
1916 . . . .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Class II Carriers

Year	Eastern District			Southern District			Western District			Total		
	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees
1914	19,001	430	\$12,512,070	11,432	243	\$6,202,422	25,021	222	\$17,363,245	55,454	272	\$36,075,337
1915	14,432	333	10,456,763	9,956	223	5,570,253	18,698	188	14,148,439	43,026	230	30,178,455
1916 . . . .	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Class III Carriers

Year	Eastern District			Southern District			Western District			Total		
	Total number all classes of employees	Per 100 miles of line	Total Compensation all classes of employees	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees
	1914	1915	1916	1914	1915	1916	1914	1915	1916	1914	1915	1916
1914	3,836	207	\$2,006,482	4,880	168	\$2,253,911	6,097	139	\$3,434,427	14,813	162	\$7,694,820
1915												
1916												
Year	Switching and Terminal Companies			All Operating Roads			Grand Totals					
	Total number all classes of employees	Total compensation all classes of employees	Per 100 miles of line	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees	Total number all classes of employees	Per 100 miles of line	Total compensation all classes of employees
	1914	1915	1916	1914	1915	1916	1914	1915	1916	1914	1915	1916
1914				1,710,296 ^a	667	\$1,381,117,292 ^a						
1915	36,039	\$30,062,987		1,654,075 ^a		\$1,403,968,437 ^a						
1916												

* Figures for 1914 taken from Statistics of Railways, 1914. I. C. C., p. 26, statement 21; for 1915 taken from the Twenty-eighth annual report of the statistics of Railways in the United States for the year ended June 30, 1915, I. C. C., p. 26, statement 13; for 1916 taken from Abstract of Steam Railways in the United States for the year ended June 30, 1916, p. 3.

^a Does not include I. C. C. returns for switching and terminal companies.

For employees are thus not fully comparable with similar returns for prior years. For example, for prior years, the average number of employees in their service was 1,654,075 as the average number of employees in their service during the year ended June 30, 1916. The total number of employees reported as paid to railway employees during the year by roads of the same classes, operating 258,783.77 miles of line, was \$1,403,968,437. In 1915 the Interstate Commerce Commission for the first time prescribed rules to govern the railway companies in the classification of steam-railway employees for compensation for the annual reports required to be made by such companies to the Commission. These rules became formally effective on July 1, 1915, and divide employees into 18 classes. Provision was made, however, in the forms for annual reports from officers of Class III carriers did not apply such returns, and as Class III carriers were not assigned among these 18 classes but as some of the larger carriers did not supply such returns, and as Class III carriers were not similarly requested to follow this classification, the figures here given for 1914 are not comparable with figures published relating to the year 1916. In reports for years prior to 1916, railway employees are assigned among 15 classes, which were not defined in any rules issued by the Commission. (Abstract of Statistics of Steam Railways in the United States for the year ended June 30, 1916, p. 3.)

* Figure for roads operating 258,783.77 miles of line.

TABLE 5. SUMMARY OF EQUIPMENT IN SERVICE ON JUNE 30, 1915*

Figures for equipment for the year 1914 are not given in detail because the classification changed in 1915 and was made more complete. Figures for 1916 are also incomplete as compared with 1915 but they are the only ones available.

Class of carriers and territory covered	Locomotives		Cars					Floating equipment				
	Steam	Other	Total in service	Freight train cars	Passenger train cars	Company service cars	Total in service	Contributed to fast freight lines	Steamboats and tug boats	Barges, car floats and canal boats	Other floating equipment	Total in service
Class I carriers:												
Eastern District.....	28,165	228	28,393	1,106,464	26,081	32,515	1,166,060	20,552	327	1,627	75	2,029
Southern District.....	9,984	10	9,994	392,871	6,853	13,849	413,673	.....	23	100	16	139
Western District.....	23,734	5	23,739	787,457	19,786	46,860	854,073	362	93	110	32	235
Total.....	61,883	243	62,126	2,286,792	52,690	93,224	2,432,706	20,914	443	1,837	123	2,403
Class II carriers:												
Eastern District.....	640	6	646	26,337	799	557	27,743	.....	13	3	1	17
Southern District.....	464	.....	464	10,456	524	597	11,577	.....	1	.....	1	2
Western District.....	958	11	969	23,297	703	1,002	25,062	.....	.....	.....	.....	.....
Total.....	2,062	17	2,079	60,140	2,086	2,156	64,382	.....	14	3	2	19
Class III carriers:												
Eastern District.....	192	.....	192	1,596	252	117	1,965	.....	1	.....	.....	1
Southern District.....	300	3	303	3,124	318	149	3,591	.....	1	.....	.....	1
Western District.....	398	1	399	4,086	359	288	5,333	.....	6	6	5	17
Total.....	890	4	894	9,406	929	554	10,889	.....	8	6	5	19

Sinking and Terminal Companies:											
Eastern District.....	811	8	819	11,446	60	2,027	13,533	.....	4	17	3
Southern District.....	99	.....	99	953	11	89	1,053	.....	1	.....	5
Western District.....	484	1	485	1,795	34	702	2,531	.....	8	12	3
Total.....	1,394	9	1,403	14,194	105	2,818	17,117	.....	13	29	11
All Operating Companies:											
Eastern District.....	29,808	242	30,050	1,145,893	27,192	35,216	1,208,301	20,552	345	1,647	79
Southern District.....	10,847	13	10,860	407,404	7,706	14,684	439,794	.....	26	100	22
Western District.....	25,574	18	25,592	817,235	20,912	48,862	886,999	362	107	128	40
Total.....	66,229	273	66,502	2,370,532	55,810	98,752	2,525,094	20,914	478	1,875	141
United States, 1912.....			62,262	2,215,549	51,490	115,635	2,382,674	27,376	.....	.....	.....
United States, 1911.....	Not classified		61,327	2,195,511	49,818	114,006	2,359,335	28,338	.....	.....	.....
United States, 1910.....	similarly		58,947	2,135,121	47,095	108,115	2,290,331	29,209	.....	.....	.....
United States, 1909.....			57,212	2,073,606	45,584	99,090	2,218,280	29,866	.....	.....	.....
United States, 1908.....			56,733	2,089,302	45,117	96,762	2,231,181	30,976	.....	.....	.....

* This statement includes Class I, Class II, Class III and Switching and Terminal Companies, as of June 30, 1915. Total figures for the entire United States are given for years 1908 to 1912 inclusive but do not include equipment in the service of switching and terminal companies. Figures for floating equipment are not given by I. C. C. for years prior to 1915. Table taken from the Text of the Twenty-eighth annual report on the Statistics of Railways in the United States for the year ended June 30, 1915, p. 15, statement No. 7. The total figures for the entire United States for the years 1908 to 1912 inclusive are taken from Statistics of Railways, 1914, I. C. C., p. 16, statement No. 9. For 1916 the figures are from the Abstract of Statistics of Steam Railways in the United States for the year ended June 30, 1916, p. 3.

TABLE 5, (continued) EQUIPMENT, 1916^a

It appears from the annual reports submitted to the Commission by the roads covered by this abstract that there were 63,862 locomotives in their service on June 30, 1916, as shown by the following statement:

Kind of locomotive	Class I roads	Class II roads	Class III roads	Total
Steam.....	60,790	1,928	960	63,578
Other.....	267	14	3	284
Total.....	61,057	1,942	863	63,862

The total number of cars of all classes in service was 2,478,159, assigned as follows: Passenger service, 54,664; freight service, 2,326,987; company service, 96,508. These figures do not include so-called private cars of commercial firms or corporations.

Of the cars in freight service, exclusive of caboose cars, 2,298,263 were classified as follows:

Item	Class I roads		Class II roads	
	Number	Aggregate capacity	Number	Aggregate capacity
Box cars.....	1,014,219	<i>Tons</i> 36,582,648	9,015	<i>Tons</i> 276,252
Flat cars.....	120,393	4,505,486	12,783	386,396
Stock cars.....	82,123	2,652,574	1,294	36,752
Coal cars.....	875,316	41,244,672	22,904	998,558
Tank cars.....	9,462	880,092	249	7,136
Refrigerator cars.....	51,610	1,669,462	130	3,355
Other freight-train cars.....	83,189	3,731,160	6,826	232,708
Total.....	2,236,312	90,766,094	53,201	1,941,172

Item	Class III roads		Total	
	Number	Aggregate capacity	Number	Aggregate capacity
Box cars.....	1,184	<i>Tons</i> 28,205	1,024,418	<i>Tons</i> 36,887,105
Flat cars.....	3,543	99,495	136,719	4,991,377
Stock cars.....	70	1,807	83,487	2,690,633
Coal cars.....	1,418	56,057	899,688	42,299,287
Tank cars.....	117	3,928	9,828	391,176
Refrigerator cars.....	6	150	51,746	1,672,967
Other freight-train cars.....	2,412	49,127	92,427	4,012,990
Total.....	8,750	238,269	2,298,263	92,945,535

^a Abstract of Statistics of Steam Railways in the United States for the year ended June 30, 1916, p. 3.

TABLE 6. PUBLIC SERVICE OF RAILROADS*

Item	Year ended June 30		
	1914 ¹	1915 ¹	1916 ²
Number of passengers carried.....	1,053,138,718	976,303,002	1,005,683,174
Number of passengers carried 1 mile....	35,258,497,509	32,384,247,563	34,213,596,127
Number of passenger carried 1 mile per mile of road.....	144,278	131,165	137,818
Number of tons of freight carried including freight received from connections.....	1,976,138,155	1,802,018,177	2,225,943,388
Ton mileage or number of tons carried 1 mile.....	288,319,890,210	276,830,302,723	343,099,937,805
Freight density, or number of tons carried 1 mile per mile of road.....	1,176,923	1,121,059	1,380,849
Average receipts per passenger per mile, cents.....	1.982	1.985	2.006
Average receipts per ton per mile, cents..	0.733	0.732	0.716

* These figures cover returns for class I and II roads.

¹ Figures for 1914-15 from Abstract of Statistics of Steam Railways in the United States for the year ended June 30, 1915, p. 6.

² Abstract of Statistics of Steam Railways in the United States for the year ended June 30, 1916, p. 6.

TABLE 7. ANALYSIS OF OPERATING INCOME OF RAILWAYS IN THE UNITED STATES, JULY 1, 1890, TO JUNE 30, 1917, INCLUSIVE, AND COMPARISON OF SUCH INCOME PER MILE OF ROAD, ETC., WITH BOOK COST PER MILE OF ROAD, ETC.*

Year ended June 30	Results of operation														Average age freight receipts per passenger mile	Average age freight revenue per ton-mile
	Operating revenues	Operating expenses	Operating ratio	Taxes	Income from operation	Number of miles operated (including trackage rights)	Ratio of mileage operated under track-ages to mileage with track-ages figures omitted	Average income per mile operated, adjusted to eliminate effect due to duplication on account of track-ages	Book cost of road and equipment	Number of miles of road represented	Average book cost of road and equipment per mile of road	Ratio of revenue to column (m)	Per cent			
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	
1891.....	\$1,096,761,395	\$731,887,893	66.73	\$33,280,095	\$331,593,407	161,276.17	2.43	\$2,066	\$2,106	\$8,783,532,165	143,516.64	\$49,675	3.77	806	2,142	
1892.....	1,171,407,243	780,997,096	66.67	34,063,495	356,345,852	162,397.30	2.49	2,104	2,249	8,664,394,830	143,516.64	\$49,675	3.77	806	2,126	
1893.....	1,220,751,874	827,921,299	67.82	36,514,689	356,315,886	169,779.84	2.49	2,099	2,151	8,987,545,760	161,268.07	\$5,424	3.88	878	2,111	
1894.....	1,073,361,797	731,414,322	68.14	38,125,274	303,822,201	175,690.96	2.44	1,729	1,771	9,073,476,532	164,068.71	\$5,323	3.20	860	1,986	
1895.....	1,075,371,462	725,720,415	67.49	39,832,433	309,818,614	177,746.25	2.47	1,743	1,786	9,303,490,619	167,741.38	\$4,867	3.26	839	2,040	
Total.....	5,637,653,871	3,797,941,925	67.37	181,806,986	1,637,905,960	846,889.52	2.46	1,958	2,006	\$45,775,901,741	639,324.80	\$4,310	3.57	.....	.....
1896.....	1,150,169,376	772,989,044	67.21	39,970,791	337,209,541	181,982.64	2.66	1,853	1,902	9,500,327,733	173,890.12	\$4,644	3.48	806	2,019	
1897.....	1,122,089,773	752,524,764	67.06	43,137,944	326,427,165	183,284.25	2.75	1,781	1,880	9,706,339,228	174,073.22	\$5,586	3.29	798	2,023	
1898.....	1,247,325,621	817,973,276	65.68	43,828,224	385,624,121	184,648.26	2.99	2,088	2,150	9,706,331,434	170,060.03	\$7,366	3.76	763	1,973	
1899.....	1,313,610,118	856,968,999	65.24	46,337,632	410,303,487	187,524.63	3.02	2,188	2,232	9,961,840,805	177,635.59	\$6,079	4.03	724	1,978	
1900.....	1,487,044,814	961,428,511	64.65	48,332,273	477,264,080	192,556.03	3.04	2,479	2,554	10,263,313,400	181,437.01	\$6,567	4.52	729	2,003	
Total.....	6,320,239,702	4,161,884,594	65.85	221,606,764	1,936,748,244	930,005.86	2.87	2,083	2,143	49,195,392,590	877,663.97	\$6,083	3.82	.....	.....
1901.....	1,588,528,037	1,030,397,270	64.86	50,944,372	507,184,395	195,561.92	2.95	2,598	2,670	10,408,096,085	182,734.04	\$6,941	4.69	760	2,013	
1902.....	1,726,380,267	1,116,248,747	64.66	54,465,437	555,666,083	200,154.56	2.76	2,776	2,833	10,633,321,376	187,442.35	\$6,863	5.02	767	1,966	
1903.....	1,960,948,907	1,267,538,552	64.16	57,849,569	585,458,466	205,313.54	2.96	2,852	2,936	10,973,504,903	193,323.01	\$6,616	5.19	763	2,006	
1904.....	1,976,174,091	1,388,896,253	67.79	61,696,354	574,681,484	212,243.20	3.23	2,707	2,794	11,311,537,131	198,941.19	\$7,893	4.83	780	2,006	
1905.....	2,082,482,406	1,390,602,152	66.78	63,474,679	628,405,575	216,973.61	3.61	2,896	3,001	11,951,343,949	203,228.07	\$8,808	5.10	766	1,962	
Total.....	9,272,409,708	6,133,683,274	66.14	283,430,411	2,861,296,023	1,030,246.83	3.11	2,768	2,854	55,499,897,444	966,068.66	\$7,449	4.97	.....	.....

* The following table (from the Thirty-first Annual Report of the Interstate Commerce Commission, Dec. 1, 1917, pp. 36 and 37) gives a statistical review of railway operations since 1891. Notwithstanding the unreliability of book values as a statement of investment, especially in the earlier years, and the changes in accounting requirements which affect the comparability of statistics, such a statement has value in showing the general trend of railway development in the United States.

1906.....	2,325,765,167	1,536,877,271	66.08	74,785,615	714,102,281	222,340.30	3.67	3,212	3,330	12,430,287,938	208,310.51	59,624	5.58	748	2,008
1907.....	2,589,106,578	1,748,515,814	67.53	80,312,375	760,277,389	237,454.83	3.80	3,343	3,470	12,030,244,228	210,792.59	61,816	5.61	759	2,014
1908.....	2,440,638,832	1,710,401,791	70.08	84,555,146	648,681,895	227,267.02	3.90	2,841	2,952	12,213,766,540	213,888.36	61,779	4.78	754	191,937
1909.....	2,473,205,301	1,650,084,204	66.72	90,539,014	733,642,063	232,981.11	4.16	3,145	3,276	12,609,183,515	221,679.45	61,391	5.34	763	191,928
1910.....	2,812,141,575	1,881,879,118	66.92	103,706,701	826,466,766	236,966.51	4.49	3,487	3,644	14,387,816,099	226,114.66	63,631	5.73	763	191,938
Total.....	12,640,856,453	8,827,708,198	67.48	433,977,881	3,679,170,404	1,147,019.77	4.01	3,268	3,337	66,661,398,420	1,080,785.57	61,679	5.41	.....	.....
1911.....	2,832,854,721	1,976,331,864	69.28	108,309,512	768,213,345	243,433.61	4.68	3,156	3,304	15,195,262,035	223,843.29	67,883	4.87	757	191,974
1912.....	2,906,415,869	2,035,057,539	70.02	120,091,534	751,266,806	246,898.74	4.78	3,044	3,190	15,874,579,626	229,902.66	69,049	4.62	744	191,987
1913.....	3,193,117,834	2,235,922,626	70.02	127,331,960	829,893,248	242,657.12	4.79	3,420	3,564	16,351,639,266	233,456.33	70,042	5.12	739	2,008
1914.....	3,111,396,422	2,266,176,768	72.53	140,531,575	704,685,079	245,624.55	4.79	2,869	3,006	16,936,697,840	235,985.60	71,770	4.19	733	1,982
1915.....	2,956,193,202	2,088,682,956	70.65	139,298,167	728,212,079	256,213.61	4.58	2,842	2,972	17,247,101,881	237,272.11	72,689	4.09	732	1,985
Total.....	15,019,973,048	10,602,174,743	70.59	635,562,748	3,782,240,537	1,284,757.63	4.72	3,063	3,208	81,605,281,248	1,160,459.89	70,321	4.56	.....	.....
1916.....	3,472,641,941	2,277,202,278	65.58	151,599,841	1,045,839,822	257,544.41	4.79	4,053	4,247	17,535,576,908	239,392.31	73,209	5.80	710	192,006
1917.....	3,824,419,739	2,581,838,511	67.51	172,037,276	1,069,750,514	230,906.31	10 4.72	4,632	4,851	.....	.....	1974,500	106.50	.....	.....

¹ Mileage returns for balance sheet figures not stated in the annual statistical report of the Commission.

² Does not include figures for 1891, as no mileage is stated for that year.

³ Returns do not include data for switching and terminal companies.

⁴ The averages shown for 1908 to 1912 are not fully comparable with those for previous years, chiefly for the reason that the figures upon which they are based do not include returns for switching and terminal companies.

⁵ Represent returns for Class I and Class II roads and their nonoperating subsidiaries.

⁶ Represent returns for Class I and Class II roads and their nonoperating subsidiaries.

⁷ Returns for operations, columns (b) to (i), inclusive, are based on figures which exclude returns for so-called small roads and switching and terminal companies.

⁸ Data for Class I and Class II carriers.

⁹ Figures in columns (b) to (g), inclusive, and (i) are from monthly reports of revenues and expenses of Class I roads, excluding switching and terminal companies.

¹⁰ Based on estimated figures.

¹¹ Figures taken from Text of the Twenty-eighth Annual Report on the Statistics of Railways for 1903 and 1897 each containing a similar table covering a period of years.

¹² The averages shown for 1908 to 1912 are not fully comparable with those for previous years, chiefly for the reason that the figures upon which they are based do not include returns for switching and terminal companies.

¹³ Figures for 1916 for Class I and Class II roads only.

¹⁴ Note.—For detailed analysis of Revenues and Expenses, Income Account and Profit and Loss Account see: For 1914, Statistics of Railways in the United States, I. C. C., pp. 52-62 inclusive; for 1915, Text of the Twenty-eighth Annual Report on the Statistics of Railways in the United States, I. C. C., pp. 49-73 inclusive; for 1916, Abstract of Statistics of Steam Railways in the United States for the year ended June 30, 1916, pp. 7-10 inclusive.

TABLE 8. RAILWAY CAPITAL ACTUALLY OUTSTANDING ON JUNE 30, 1915.*

Class of companies and territory covered	Stock		Funded debt					Equipment obligations
	Total	Common	Preferred	Total	Mortgage bonds	Collateral trust bonds	Income bonds	Miscellaneous obligations
Classes I, II, and III carriers and their non-operating subsidiaries:								
Eastern District.....	7,535,972,577	2,966,695,507	430,530,314	4,145,696,456	2,782,145,157	417,221,503	48,239,497	684,613,068
Southern District.....	2,859,908,518	942,991,966	209,023,625	1,707,892,927	1,354,332,218	177,794,082	53,238,043	42,561,519
Western District.....	9,394,012,849	3,377,149,830	718,877,826	5,227,968,193	3,949,396,210	691,415,994	131,883,001	460,832,969
Total.....	19,719,893,944	7,286,687,303	1,348,431,765	11,084,574,576	8,089,574,585	1,194,573,799	233,350,541	1,194,997,536
Switching and terminal companies and their non-operating subsidiaries:								
Eastern District.....	202,003,045	53,972,952	1,198,000	146,891,008	142,015,667			1,946,000
Southern District.....	46,883,781	9,718,500	988,000	36,177,281	36,177,281			
Western District.....	193,261,553	54,699,308	5,510,000	133,172,250	127,554,000	4,966,250		753,000
Total.....	442,238,379	128,391,755	7,696,000	316,240,624	305,744,948	4,966,250		2,699,000

RAILWAY CAPITAL NOMINALLY ISSUED OR NOMINALLY OUTSTANDING (HELD BY OR FOR COMPANY) ON JUNE 30, 1915.*

Class of companies and territory covered	Stock		Funded debt					Equipment obligations
	Total	Common	Preferred	Total	Mortgage bonds	Collateral trust bonds	Income bonds	Miscellaneous obligations
Classes I, II, and III carriers and their non-operating subsidiaries:								
Eastern District.....	380,658,180	149,280,494	18,023,977	212,753,709	186,913,855	14,764,856	1,178,577	3,536,921
Southern District.....	290,709,948	67,127,089	3,927,850	219,645,089	198,681,196	783,500	20,863	2,460,500
Western District.....	736,697,006	96,652,665	23,923,328	616,091,013	572,313,112	18,001,800	12,809,575	3,515,293
Total.....	1,408,065,134	312,100,198	11,46,475,155	1,048,489,781	957,906,163	33,548,956	14,009,315	9,912,514
Switching and terminal companies and their non-operating subsidiaries:								
Eastern District.....	1,354,000	118,000		1,198,000	1,088,000			48,000
Southern District.....	1,265,000			1,265,000	1,265,000			
Western District.....	20,316,075	7,579,575		12,336,500	12,336,500			
Total.....	22,735,075	7,997,575		14,727,500	14,680,500			48,000

TABLE 8 (continued). AMOUNT AND PER CENT OF CAPITAL STOCK UPON WHICH DIVIDENDS WERE DECLARED, AND AMOUNT AND RATE PER CENT OF DIVIDENDS DECLARED, FOR THE YEARS ENDED JUNE 30, 1915 TO 1888

Year	Per cent of stock yielding dividends	Amount of stock yielding dividends	Amount of dividends	Average rate on dividend-yielding stock	Year	Per cent of stock yielding dividends	Amount of stock yielding dividends	Amount of dividends	Average rate on dividend-yielding stock	Average rate on all stock
1915: ¹					1906	66.54	\$4,526,958,760	\$272,795,974	Per cent	Per cent
Class I carriers and their non-operating subsidiaries	63.40	\$5,149,819,412	\$323,862,138	6.29	1905	62.84	4,119,086,714	237,964,482	5.78	4.01
Class II carriers and their non-operating subsidiaries	15.94	63,701,400	4,097,681	6.43	1904	57.47	3,643,437,319	221,941,049	6.09	3.63
Class III carriers and their non-operating subsidiaries	5.60	6,325,750	518,119	8.19	1903	56.06	3,450,737,869	196,728,176	6.70	3.50
Total all classes					1902	55.40	3,337,644,681	183,391,655	5.55	3.08
1914 ¹					1901	51.27	2,977,576,179	156,735,784	5.26	2.70
1913 ¹					1900	45.66	2,668,969,895	139,597,972	5.23	2.39
1912 ¹					1899	40.61	2,239,502,545	111,009,822	4.96	2.01
1911 ¹					1898	33.74	1,818,113,082	96,182,889	5.29	1.78
1910 ¹					1897	29.90	1,603,549,978	87,110,599	5.43	1.62
1909 ¹					1896	29.83	1,559,024,075	87,603,371	5.62	1.63
1908 ¹					1895	29.94	1,485,618,453	86,287,543	5.74	1.72
1907					1894	36.57	1,767,925,565	95,515,226	5.40	1.97
					1893	38.76	1,809,600,946	100,929,885	5.58	2.16
					1892	30.40	1,825,705,437	97,614,745	5.35	2.11
					1891	40.36	1,796,390,636	91,117,913	5.07	2.05
					1890	36.24	1,598,131,933	87,071,613	5.46	1.97
					1889	38.33	1,629,750,927	82,110,198	5.04	1.93
					1888	38.56	1,490,267,149	80,238,065	5.38	2.08

* Twenty-eighth Annual Report on the Statistics of Railways in the United States for the year ended June 30, 1915, pp. 32, 33 and 35. Figures for 1914

not completely comparable with 1915 and for that reason are not given here.

¹ Includes \$598,345, receipts outstanding for installments paid, and \$500,035, receipts outstanding for funded debt.

² Includes \$598,345, receipts outstanding for installments paid.

³ Includes \$5,935,162, debenture stock.

⁴ Includes \$500,035, receipts outstanding for funded debt.

⁵ Includes \$1,750, receipts outstanding for funded debt.

⁶ Includes \$213,285, receipts outstanding for funded debt.

⁷ Includes \$220,000, receipts outstanding for funded debt.

⁸ Includes \$65,000, receipts outstanding for funded debt.

⁹ Includes \$41,000, receipts outstanding for funded debt.

¹⁰ Includes \$20,000, debenture stock.

¹¹ Does not include returns for switching and terminal companies.

RAILWAY CAPITAL NOMINALLY ISSUED OR NOMINALLY OUTSTANDING ON JUNE 30, 1916

Class of roads	Total railway capital	Stock			Funded debt						
		Total amount	Common	Preferred	Debenture	Total amount	Mortgage bonds	Collateral trust bonds	Income bonds	Miscellaneous obligations	Equipment obligations
Class I roads.....	\$1,301,170,117	\$284,143,290	\$234,120,240	\$20,994,050	\$30,000	\$1,037,026,827	\$919,040,966	\$71,265,343	\$12,814,115	\$3,919,550	\$23,886,833
Class II roads.....	60,069,244	32,402,050	32,306,550	106,500	.....	27,637,294	26,898,381	450,000	178,913	110,000	.....
Class III roads.....	7,737,283	2,062,020	2,063,020	24,000	.....	5,675,363	5,570,383	5,000	100,000	.....	.....
Non-operating roads.....	41,932,309	16,968,734	15,638,834	1,239,900	.....	24,963,575	24,291,575	184,000	395,500	92,500	.....
Total.....	1,410,879,153	315,576,094	284,012,644	31,543,450	20,000	1,095,303,069	976,801,285	72,004,393	14,488,228	9,122,050	23,896,583

* Abstract of Statistics of Steam Railways in the United States for the year ended June 30, 1916, pp. 4 and 5.

Of the total capital stock actually outstanding for the roads under consideration, \$3,581,434,810, or 40.96 per cent, paid no dividends. The amount of dividends declared during the year (by both operating and non-operating companies represented in this statement) was \$411,975,955, being equivalent to 7.98 per cent on dividend-paying stock. The average rate of dividends paid on all stocks actually outstanding, pertaining to the roads under consideration, was 4.71.

TABLE 9. SUMMARY OF THE WORLD'S RAILWAYS AND RATIO OF MILEAGE TO AREA AND POPULATION IN EACH COUNTRY, TOGETHER WITH STATE-OWNED MILEAGE IN 1913*

Countries	Mileage in 1913		Miles of line per 100 sq. miles	Inhabitants per mile of line
	State railways	Total railways		
I. EUROPE				
Germany	36,538	30,513	19.0	1,698
Austria-Hungary (including Bosnia and Herzegovina)	23,391	28,643	10.9	1,792
Great Britain and Ireland		23,385	19.3	1,943
France	5,597	31,737	15.3	1,241
Russia in Europe (including Finland 2,329 miles)	24,509	38,562	1.9	3,860
Italy	9,070	10,933	9.8	3,162
Belgium	2,699	5,465	48.1	1,356
Luxemburg	122	326	32.5	757
Netherlands	1,111	2,019	15.8	2,880
Switzerland	1,698	3,015	18.8	1,177
Spain		9,517	5.0	1,967
Portugal	712	1,849	5.2	2,932
Denmark	1,215	2,338	15.8	1,105
Norway	1,631	1,917	1.6	1,222
Sweden	2,858	8,984	5.2	609
Servia	633	633	3.4	4,480
Roumania	2,200	2,333	4.7	2,932
Greece		998	4.0	2,644
Bulgaria	1,197	1,197	3.2	3,584
Turkey in Europe		1,236	1.9	5,040
Malta, Jersey, Isle of Man		68	16.1	5,376
Total for Europe, 1913	115,181	214,668	5.6	2,042
Total for Europe, 1912	111,745	212,425	5.6	2,064
" " " 1911	109,719	210,574	5.6	2,063
" " " 1910	107,727	207,444	5.5	2,180
" " " 1909		204,864	5.5	1,923
" " " 1908		201,619	5.3	1,941
" " " 1907		199,345	5.3	1,887
" " " 1906		196,437	5.2	1,993
" " " 1905		192,507	5.1	2,084
" " " 1904		189,806	5.0	2,084
" " " 1903		186,685	5.0	2,084
" " " 1902		183,989	4.9	2,127
" " " 1901		180,817	4.8	2,174
" " " 1900		176,396	4.7	2,220
" " " 1899		172,953	4.6	2,220
" " " 1898		167,614	4.4	.....
" " " 1897		163,550	4.3	.....
" " " 1896		160,030	4.2	.....
Increase in 18 years		54,638	.....	.....

* This table is taken from Railway Statistics of the United States of America for the year ending June 30, 1916, by the Bureau of Railway News and Statistics, pp. 34, 35 and 36. The original source of these figures is the Archiv für Eisenbahnwesen, May-June, 1915.

TABLE 9, (continued). WORLD'S RAILWAYS AND RATIO OF MILEAGE TO POPULATION

Countries	Mileage in 1913		Miles of line per 100 sq. miles	Inhabitants per mile of line
	State railways	Total railways		
II. AMERICA				
Canada.....	1,768	29,233	0.8	265
United States of America (inclusive of Alaska 653 miles).....		254,769	7.1	381
Newfoundland.....		768	1.8	309
Mexico.....	12,324	15,805	2.1	922
Central America.....	358	2,001		
Greater Antilles.....	149	3,398		
Lesser Antilles.....		335		
Colombia.....	110	620	0.13	7,331
Venezuela.....	68	632	0.16	3,840
British Guiana.....		104	0.11	2,829
Dutch Guiana.....		37		
Ecuador.....		650	0.64	2,150
Peru.....	1,050	1,715	0.32	2,781
Bolivia.....		1,499	0.32	1,507
Brasil.....	6,712	15,491	0.48	1,613
Paraguay.....		231	0.16	2,734
Uruguay.....		1,636	2.4	637
Chili.....	1,977	3,949	1.3	840
Argentine Republic.....	3,482	20,593	1.9	238
Total for America.....	27,998	353,466		
III. ASIA				
Central Russia in Asia, including Siberia and Manchuria.....	6,788	9,864		
China.....		6,109	0.14	53,760
Japan (including Corea).....	4,859	6,811	2.7	9,487
British India.....	29,252	34,572	1.8	8,960
Ceylon.....		602	2.4	6,720
Persia.....		33	0.005	268,800
Asia Minor, Syria, Arabia, including Cyprus.....	910	3,390	0.48	5,760
Portuguese Indies.....		51	3.5	11,520
Malay Archipelago.....		856	2.6	840
Dutch Indies.....	1,533	1,769	0.8	16,128
Siam.....	596	701	0.32	13,440
Cochin China.....		2,292		
Total for Asia.....	43,938	67,050		
IV. AFRICA				
Egypt.....	2,903	3,687	1.0	3,043
Algiers and Tunis.....	1,799	3,957	1.1	1,698
Belgian Congo.....		862		
South African Union, including Cape Colony, Natal, Central South Africa and Rhodesian Railways.....	7,829	10,929		

TABLE 9, (*continued*). WORLD'S RAILWAYS AND RATIO OF MILEAGE TO POPULATION

Countries	Mileage in 1913		Miles of line per 100 sq. miles	Inhabitants per mile of line
	State railways	Total railways		
COLONIES				
German.....	2,589	2,589		
English.....	1,311	2,350		
French.....		1,995		
Italian.....		96		
Portuguese.....		1,007		
Total for Africa.....	16,431	27,472		
V. AUSTRALIA				
New Zealand.....	2,854	2,883	2.7	354
Victoria.....	3,639	3,664	4.2	347
New South Wales.....	3,922	4,088	1.3	391
South Australia.....	2,076	2,308	0.16	181
Queensland.....	4,514	4,807	0.64	188
Tasmania.....	506	699	2.7	266
West Australia.....	2,848	3,422	0.32	138
Hawaii, etc.....		88	1.3	1,241
Total for Australia.....	20,359	21,959	0.64	273
RECAPITULATION				
I. Europe.....	115,181	214,668	5.6	2,042
II. America.....	27,998	353,466		
III. Asia.....	43,938	67,050		
IV. Africa.....	15,431	27,472		
V. Australia.....	20,359	21,959	0.64	273
Total.....	223,907	684,615		

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STATISTICAL BIBLIOGRAPHY

For a complete detailed study of the railroads of the United States the following list of statistical sources will be found valuable. This list includes only the more important sources.

I. INTERSTATE COMMERCE COMMISSION PUBLICATIONS

A. *Statistical of Railways in the United States*. Published annually. This is the most comprehensive and detailed work available, presenting operating and financial statistics of railroads in this country. It is compiled from the annual reports of each road to the Commission and contains the following tables: (1) general balance sheet, income statement, profit and loss statement, operating revenues and expenses in detail, operating statistics, and an itemized statement of capital and investment other than road and equipment. These tables are given for each railroad. The roads are divided according to the classification adopted by the Commission defined (p. 000) in this volume and tables arranged accordingly. (2) Preceding these tables is an analytical report by the Commission's statistician together with condensed tabulations summarizing the large tables.

This report is usually two years late in being published, but this disadvantage is partially offset by preliminary reports made as follows:

1. *Abstract of Statistics of Steam Railways in the United States*. A brief tabular summary of the statistics of the more important groups of railroads.
2. *Preliminary Abstract of Statistics of Common Carriers* containing an abstract of the individual reports of railroads to the Commission.
3. *Text of the Annual Report on the Statistics of Railways*, containing most of the tables, and summaries as well as the statistician's analyses which will appear in the final volume. This is not complete.

These statements appear in the above order anywhere from one to two years following the close of the fiscal year.

In addition, the Commission publishes as soon as possible after the close of each month a statement of the total monthly earnings and expenses of railroads.

II. STATE REPORTS

Most of the states having utilities or railroad commissions publish statistics covering the roads within their borders. Some of these, of which New York is typical, contain as complete and accurate information as to intrastate railroads as the Interstate Commerce Commission reports for interstate railroads. These can be obtained from the various state authorities.

III. RAILROAD STATISTICAL BUREAUS

Two bureaus maintained by the railroads publish at regular intervals statistics and other information concerning railroads.

1. The Bureau of Railway Economics, Washington, D. C., publishes a monthly statement of revenues and expenses of steam roads of Class I. In addition they publish other bulletins at intervals. Among the recent ones are the

following: (a) *Summary of Railway Returns for the fiscal year ending June 30, 1916* (similar report for 1915); (b) *Comparative Railway Statistics, United States and Foreign Countries 1912, and 1913*; (c) *Statistics of Railways 1904-1914. United States*. This bureau compiles its statistics from the annual reports of the railroads to the Interstate Commerce Commission and endeavors to publish them as soon as possible after the close of each stated period.

2. The Bureau of Railway News and Statistics of Chicago publishes annually a pamphlet containing statistical tables covering American and foreign railways, and also a number of *The Railway Library* which contains selections written by leading authorities in the field of transportation as well as statistical compilations.

The publications of these two bureaus can be obtained upon request.

IV. RAILWAY ANNUAL REPORTS TO STOCKHOLDERS

These are prepared according to forms prescribed by the Interstate Commerce Commission. They contain the most detailed statistical analysis of the individual roads obtainable.

V. POOR'S MANUAL OF RAILROADS AND MOODY'S MANUAL OF RAILROADS

each of which contains an analytical summary of statistics for each road in the United States with comparisons with previous years. The statistics are taken from the railroad's annual reports.

VI. VARIOUS BROKERAGE HOUSES

also compile and publish statistical reports dealing particularly with the financial aspects of the railroads.

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